

**AN EXPLORATION OF THE PHENOMENA  
OF MULTIPLE ADDICTIONS AND  
ADDICTION INTERACTION DISORDER IN  
DURBAN, SOUTH AFRICA**

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College of Humanities, School of Applied Human Sciences, University of  
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**October 2013**

## **ABSTRACT**

Addiction to drugs is a widely acknowledged problem in South Africa. Newer developments in the study of addiction include behaviours such as gambling and sex as part of a broader syndrome. International research has established that most people with one addiction are at risk for co-occurring addictions which are frequently undiagnosed and untreated. Multiple addictions (MA) have been shown to combine in specific patterns to produce addiction interaction disorder (AID) resulting in a more complex, treatment-resistant illness.

This was the first study in South Africa to investigate if people with substance use disorders had other addictions. The research had three aims: to establish if in-patients admitted to three drug rehabilitation centres had other addictions, to investigate the extent of the MA and AID and to determine whether the treatment programmes managed them appropriately. The study employed the mixed methods research design and was located at three in-patient facilities in Durban, KwaZulu-Natal. During the first phase, discussion groups were held with professionals that explored their perceptions of MA, AID and current treatment programmes. The second phase involved a survey of 123 participants screened for poly-substance abuse, sex (including internet) addiction and problem gambling. The third phase utilised in-depth interviews with 25 participants displaying MA to understand the development of addiction, AID and treatment received. The data were analysed utilising descriptive and statistical analysis for the survey data, and thematic analysis for the in-depth interviews and discussion groups.

The study found a high incidence of MA within the survey population of 54%; 37% of participants tested positive or at risk for problem gambling and 41% tested positive for sex addiction with 24% of the participants being positive for both. In-depth interviews revealed high rates of trauma, especially for the female participants and demonstrated the complex interrelationship between addictions. AID was identified in all 25 participants. In KwaZulu-Natal, it appears that MA and AID are currently not being assessed or treated. The study highlights the need for a broader conceptualisation of addiction which would improve current assessment and treatment and has implications for further training of professionals and addiction policy in South Africa.

# COLLEGE OF HUMANITIES

## DECLARATION - PLAGIARISM

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*A thoroughly good relationship with ourselves results in being still, which doesn't mean we don't run and jump and dance about. It means there's no compulsiveness. We don't over-work, over-smoke, over-seduce. In short, we begin to stop causing harm.*

*Pema Chodron*

## **PROLOGUE**

I have been in practice as a social worker since 1983, and have encountered the consequences of addiction in every setting in which I have worked. I had the privilege of doing my practical work at a chemical dependency rehabilitation centre in 1982, and my research dissertation examined the role of groupwork in the treatment of alcoholism. I have encountered the devastating effects of addiction throughout my career. Addiction has caused havoc in the lives of many of my clients and their families and led, personally, to much frustration as a practitioner. A turning point came for me when I attended Patrick Carnes' workshop in 2008 on sex addiction and multiple addictions. This workshop provided me with a more profound grasp of addiction and why addicts cannot stop or just say 'no', especially in the face of serious consequences. The information provided on MA and AID, as well as the developments in the field of neurobiology, made the problem of addiction, paradoxically, far more complex, but, also, clearer and simpler to grasp.

In summary, my interest in this topic is part of my ongoing development as a social worker, my commitment to individuals and families who are affected by addiction and in working with them to offer the best treatment for this complex illness.

## **ACKNOWLEDGEMENTS**

My thanks go to many the people who accompanied me on my journey in accomplishing this thesis and without whom I would not have been able to complete this process.

Firstly, I need to thank the participants for sharing their stories with patience, great courage and honesty, and allowing me to learn so much from them.

I am grateful to the staff and management of the three centres who welcomed me into their institutions and for their encouragement and willing participation in the research process.

I owe an enormous debt to my two supervisors, Doctor Reshma Sathiparsad and Professor Myra Taylor for their invaluable insights, encouragement, support and guidance throughout this challenging journey. Thank you for your patience and unselfish assistance.

Thank you to those who helped me with editing: Emeritus Professor Reverend Father Rodney Moss for his encouragement and assistance, to Professor Geoffrey Harris for his valuable insights and to Ms Carrin Martin for her guidance.

To my family, Michaël, Nicholas and Alexander for their patience, love and support, without whom this thesis would not have been possible. And finally, I need to express my deep gratitude to the grace that has continually guided me and the spiritual support I have received from my relationship with God.

# **CONTENTS**

## **CHAPTER 1: STUDY OVERVIEW**

	<b>Page</b>
1.1 Introduction	1
1.2 Background	4
1.3 Problem statement	8
1.4 Research questions	8
1.5 Aims of the research	9
1.6 Objectives of the research	9
1.7 Principal theory upon which the study is based	10
1.8 Definition of key concepts	14
1.9 Significance of the study	15
1.10 Outline of chapters	16

## **CHAPTER 2: LITERATURE REVIEW: AN OVERVIEW OF DEFINITIONS, CHARACTERISTICS AND CAUSATION OF ADDICTION**

2.1 Introduction	18
2.2 History of the use of the term addiction	18
2.3 Definitions and characteristics of addiction	19
2.3.1 Definitions of addiction	20
2.3.2 Diagnostic criteria and characteristics of addiction	21
2.4 The rewards of addiction	27
2.5 Important factors in the causation of addiction	29
2.5.1 The family's role in addiction	30
2.5.2 The role of trauma in addiction	39
2.5.3 Adolescence	45
2.6 Chapter summary	48

### **CHAPTER 3: LITERATURE REVIEW: MULTIPLE ADDICTIONS, ADDICTION INTERACTION DISORDER AND TREATMENT**

3.1	Introduction	50
3.2	The four categories of addiction	50
3.3	Multiple addictions and addiction interaction disorder	52
3.4	Substances	53
3.5	Process addictions	58
	3.5.1 Gambling	59
	3.5.2 Sex addiction	64
	3.5.3 Other process addictions	69
3.6	Relationship addictions	71
	3.6.1 Codependency	71
	3.6.2 Trauma bonding	72
	3.6.3 Co-sex addiction	72
	3.6.4 Compulsive romantic attachment	72
3.7	Core feeling state addictions	73
3.8	Addiction interaction disorder	74
3.9	Treatment of addiction and relapse rates	79
	3.9.1 Treatment	79
	3.9.2 Relapse rates	82
3.10	Chapter Summary	84

### **CHAPTER 4: METHODOLOGY**

4.1	Introduction	85
4.2	The research methodology	85
4.3	The research design	91
	4.3.1 The research process	92
	4.3.2 Selection of the research sites	96
	4.3.3 Time frame of the research and pilot study	98



4.3.4	Sampling	100
4.3.5	Development and selection of the research instruments	103
4.3.6	Data collection	111
4.3.7	Data management	118
4.3.8	Data analysis	119
4.4	Validity and reliability of the findings	124
4.5	Ethical considerations	126
4.6	Chapter summary	128

## **CHAPTER 5: DATA ANALYSIS: PROFILE OF IN-PATIENTS**

5.1	Introduction	130
5.2	Biographical information	131
5.2.1	Personal profile	131
5.2.2	Education and employment	133
5.2.3	Admission to rehabilitation	134
5.2.4	Co-occurring physical and mental conditions	134
5.2.5	Other family members with addiction	136
5.3	Drug use	136
5.4	Problem gambling and sex addiction	139
5.4.1	Presence of problem gambling	139
5.4.2	Presence of sex addiction	140
5.4.3	Presence of internet sex addiction	140
5.4.4	Relationship between gambling and sex addiction	140
5.4.5	Sexual abuse as a child and relationship to sex and gambling addictions	141
5.5	Previous treatment	142
5.6	Discussion of results from in-patient survey	143
5.6.1	Biographical data	143

5.6.2	Education and employment	146
5.6.3	Admission to rehabilitation	147
5.6.4	Co-occurring physical and mental conditions	147
5.6.5	Drug use	148
5.6.6	Problem gambling	152
5.6.7	Sex addiction	153
5.6.8	Sexual abuse as a child	153
5.7	Chapter summary	154

## **CHAPTER 6: DATA ANALYSIS: THE DEVELOPMENT OF ADDICTION AND SUBSTANCE USE DISORDER**

6.1	Introduction	156
6.2	Development of addiction: Role of the family of origin	156
6.2.1	Family relationships	158
6.2.2	Other family problems	165
6.3	Development of addiction: The role of trauma	168
6.3.1	Experiences of trauma in childhood	168
6.3.2	Experiences of trauma in adulthood	178
6.4	Substances	182
6.4.1	Drug debut and effects	183
6.4.2	Crossing the line into addiction	187
6.5	Chapter Summary	191

## **CHAPTER 7: DATA ANALYSIS: MULTIPLE ADDICTIONS**

7.1	Introduction	192
7.2	Gambling	193
7.2.1	Gambling debut and its effects	194
7.2.2	Gambling addiction	197

7.3	Sex Addiction	201
7.3.1	Selling sex	201
7.3.2	Buying sex	205
7.3.3	Compulsive seduction of partners	207
7.3.4	“I can’t say no to sex”	208
7.3.5	Infidelity to partner	210
7.3.6	Compulsive use of pornography	211
7.3.7	Compulsive masturbation	213
7.3.8	Sexual aversion	214
7.3.9	Exhibitionism	215
7.4	Other Process Addictions	217
7.4.1	Food	218
7.4.2	Exercise	221
7.4.3	Money	222
7.5	Relationship Addictions	223
7.5.1	Codependency	224
7.5.2	Trauma bonding	226
7.5.3	Co-sex addiction	227
7.5.4	Compulsive romantic attachment	228
7.6	Core Feeling States	229
7.7	Chapter Summary	230

## **CHAPTER 8: DATA ANALYSIS: ADDICTION INTERACTION DISORDER AND TREATMENT**

8.1	Introduction	232
8.2	Addiction interaction	232
8.2.1	Cross tolerance	235
8.2.2	Withdrawal mediation	236
8.2.3	Replacement	238

8.2.4	Alternating addiction cycles	240
8.2.5	Masking	242
8.2.6	Ritualising	244
8.2.7	Intensification	246
8.2.8	Numbing	250
7.8.9	Disinhibiting	252
8.2.10	Combining	254
8.3	Implications of addiction interaction disorder	255
8.4	Consequences of addiction	258
8.4.1	Biological aspects	258
8.4.2	Social aspects	259
8.4.3	Psychological aspects	262
8.5	Treatment experiences	264
8.5.1	Using drugs of having illicit relationships in treatment	264
8.5.2	Poor motivation for treatment	265
8.5.3	Treatment programme not addressing trauma	266
8.6	Staff knowledge and current treatment of multiple addictions and addiction interaction disorder	268
8.6.1	Assessment of other addictions	270
8.6.2	Addictions addressed by current treatment programmes	270
8.6.3	Opinions regarding Carnes' four categories of addiction and addiction interaction disorder	271
8.6.4	Other issues raised by staff	272
8.7	Chapter Summary	275

## CHAPTER 9: CONCLUSION

9.1	Introduction	276
9.2	Summary of the research process	279
9.3	Limitations of the Study	283
9.4	Main findings and conclusions of the study	283
9.4.1	Profile of in-patients	283
9.4.2	Causation of addiction	284
9.4.3	Experiences of multiple addictions and addiction interaction disorder	287
9.4.4	Previous treatment experiences amongst substance users	289
9.4.5	Views of professionals treating addiction	291
9.4.6	Preliminary recommendations regarding treatment of addiction	292
9.5	Suitability of the research method	293
9.6	Recommendations of the study	294
9.6.1	Implications for assessment, treatment and staff training	294
9.6.2	Implications for future research	297
9.6.3	Implications for policy	299
9.7	Conclusion	301
	References	302
	Appendices	

## LIST OF TABLES

3.1	Drugs and dependence liability	55
4.1	Relationship between research objectives and phases of the research	93
4.2	Research plan	95
4.3	Mixed methods research design: concurrent embedded strategy	100
4.4	Number of patients who participated versus refusals	116
5.1	Profile of participants in the study	132
5.2	Occupational group of participants in percentages	133
5.3	Referral sources of participants in percentages	134
5.4	Co-occurring psychiatric disorders amongst the participants	135
5.5	Percentage of reported addiction of participants' relatives	136
5.6	Number of drugs used by participants	137
5.7	Profile of drug use reported by participants	138
6.1	Profile of male in depth interview participants	157
6.2	Profile of female in depth interview participants	158
6.3	Types of childhood trauma identified	169
8.1	Addiction interaction patterns experienced by the participants and as reported by Carnes et al. (2005)	235
8.2	Profile of professionals who participated in the study	269

## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>AA</b>	Alcoholics Anonymous
<b>AID</b>	Addiction Interaction Disorder
<b>APA</b>	American Psychiatric Association
<b>DSM-IV</b>	Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition
<b>DSM-IV-T-R</b>	Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision
<b>DSM-5</b>	Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition
<b>FACES</b>	The Family Adaptability and Cohesion Scale
<b>HIV</b>	Human Immunodeficiency Virus
<b>ICD</b>	International Classification of Diseases
<b>KZN</b>	KwaZulu-Natal
<b>MA</b>	Multiple Addictions
<b>MRC</b>	Medical Research Council
<b>NA</b>	Narcotics Anonymous
<b>NDMP</b>	National Drug Master Plan
<b>PG</b>	Pathological Gambling
<b>PGSI</b>	Problem Gambling Screening Inventory
<b>PTSD</b>	Post Traumatic Stress Disorder
<b>R-SAST</b>	Revised Sex Addiction Screening Test

<b>SACENDU</b>	South African Community Epidemiology Network on Drug Abuse
<b>SAQ</b>	Self- Administered Questionnaire
<b>SAITS</b>	South African Institute of Traumatic Stress
<b>SAPS</b>	South African Police Service
<b>UKZN</b>	University of KwaZulu-Natal
<b>US</b>	United States of America
<b>WHO</b>	World Health Organisation
<b>YLD</b>	Years lived with Disability



# CHAPTER 1

## STUDY OVERVIEW

### 1.1 INTRODUCTION

Substance abuse is widely acknowledged as a serious problem, affecting the lives of many individuals, families and society in general. It is estimated by the South African Medical Research Council (MRC) that 11% of the country's population, or over five million people, will suffer from an alcohol or drug disorder in their lifetime (Makuyana, 2013). Substance abuse and use disorders in South Africa are acknowledged as being widespread and causing or being linked to numerous social problems, including domestic violence, road accidents and crime, in addition to adding to the country's already high burden of disease (Njuho & Davids, 2011). This is indicated by the South African National Drug Master Plan (2012 – 2016) which states:

The scourge of substance abuse continues to ravage our communities, families and particularly the youth, the more so as it goes hand in hand with poverty, crime, reduced productivity, unemployment, dysfunctional family life, escalation of chronic diseases and premature death (Department of Social Development, 2012, p. 1).

Advances in neuroscience in recent decades have led to broadening the original concept of addiction to include behaviours, relationships and even core feeling states that are recognised as sharing a similar potential to produce dependence (Shaffer et al., 2004; Wareham & Potenza, 2010). Carnes (2008) proposes four categories of addictions, and asserts that

clinicians assessing and treating addiction should be mindful of the full spectrum, rather than the traditionally narrow focus on the presenting symptoms, which are often the more socially acceptable abuse of substances. The categories proposed are first, substances that include legal and illicit drugs; and second, process addictions that include sex, food, money, gambling and exercise (Frascella, Potenza, Brown, & Childress, 2010). The third category relates to relationship addictions (Doweiko, 2006), and the fourth embraces core feeling states such as rage, anger, despair and hopelessness (Bradshaw, 2005; Carnes, 2008). It has been found that these phenomena share similar neurobiological features, antecedents, symptoms and sequelae to the traditionally acknowledged addiction to substances (Hoffman, 2011; Frascella et al., 2010).

This categorisation has led to many researchers in the field to call for a new, expanded conception of addiction, to view the different manifestations as part of an over-arching syndrome, rather than a narrow focus on its' different presentations (Frascella et al., 2010; Shaffer et al., 2004). Research has found that the majority of addicts will have more than one addiction (MacLaren & Best, 2010; Sussman, Lisha & Griffiths, 2011), leading to the term multiple addictions (MA) (Carnes, 2008). Specifically in relation to sex addicts, 76% were assessed as having one or more addictions in addition to the sex addiction for which they were receiving treatment (Carnes, Murray, & Charpentier, 2005).

Current research demonstrates poor treatment outcomes for substance dependence. Relapse rates are reported to be 80% (Shaffer et al., 2004) for drug addiction in general, 40-70% for alcohol dependence and 97% for opioid dependence within the first year of completing

treatment (Kampman, 2009). No local research is available on relapse rates (Bowles, Louw & Myers, 2011). Most recent research focusing on the improvement of assessment and treatment of addictions makes no mention of multiple addictions, the focus being exclusively on substances (Krippner & Dunbar, 2011). In South Africa, as well as internationally, the profile of patients requiring treatment has changed, making treatment more complex (Bowles et al., 2011; Flores, 2004). The most notable factors are that people are presenting at a younger age for treatment and with a history of more poly-substance abuse (Parry, Plüddermann & Bhana, 2009).

Addiction interaction has been proposed as a model to explain the manner in which multiple addictions become organised in specific patterns, with the resultant illness being much greater and more potent than the sum of its parts. This model “integrates the addictions and proposes that addictions have metapatterns that are important and discernible clinically” (Carnes et al., 2005, p. 87). The specific mechanisms of interaction will be described in the literature review and explored in this study. This model presents a major challenge to the traditional assessment and rehabilitation methods utilised to treat substance use disorders that traditionally focus exclusively upon substances (Bowles et al., 2011). A comprehensive literature search revealed that no research has been conducted in South Africa into the prevalence of multiple addictions amongst people with substance use disorders. Given the scope of addiction problems in this country, it would seem that such a study is essential to improve efforts to combat and treat addiction.

## **1.2 BACKGROUND**

The full spectrum of addictions as described above can wreak havoc at all levels of society, from the individual, their family, friends and employers, to the broader community and, at a national level, it can hamper the development of the country. International research suggests that the impact of psychiatric illness, substance use and addiction is considerable, as these cause, either directly or indirectly, 70% of the factors resulting in disability in the world (Daley, 2003). These factors include major depression, road traffic accidents, alcohol use, self-inflicted injuries, bipolar disorder, violence and schizophrenia (Daley, 2003). In 2012, mental and behavioural disorders (including addiction) were listed as being the major cause of years lived with disability (YLDs) (Vos et al., 2012). In South Africa, substance use is widely acknowledged as the fuel for crime (Seggie, 2012) and for the spread of sexually transmitted infections, including HIV and AIDS, due to the disinhibiting effect of substances (Luseno & Wechsberg, 2009). The National Drug Master Plan (2012–2016) (Department of Social Development, 2012, p. 42) acknowledges that “in many cases, substance abuse is a primary underlying cause of social ills”. The MRC (South Africa) reports that nationally, 47% of people involved in non-natural deaths in 2005 had blood alcohol concentrations greater than 0.05 mg/100 ml, which is the legal limit for blood alcohol for driving (Department of Health, 2008).

Other forms of “excessive appetites” (Orford, 1985, 2000) are linked to major health and social problems. Worldwide, obesity, cigarette smoking and alcohol abuse are the three major health risks leading to disability, overtaking the health risks attributable to malnutrition and communicable diseases (Murray et al., 2012). In South Africa, obesity and its health

sequelae are a concern as 61% of South Africans are overweight, obese or morbidly obese (Mail and Guardian reporter, 2010). The prevalence of pathological gambling was estimated to be 4.7% of people using casinos in South Africa in 2008, with the rates for gamblers using informal gambling settings estimated to be higher (Casino Association of South Africa website, 2011). Furthermore, access to pornography and anonymous sexual encounters via the internet are referred to as the “crack cocaine” of sex addiction (Carnes, 2008). A strong case can be made that addiction has a profoundly negative impact upon society at all levels, and research that aims to refine an understanding of how addiction works, and develops more effective ways to treat such addictions, is essential for the health of the nation.

This research takes place within the broader context of mental health care professionals’ commitment to improving the knowledge base, and its application to ensure the best treatment for people living with addiction. Social workers engage with individuals and families where there are many complex issues arising from addiction and its consequences. It is argued that they are at the coalface when working with addiction in its many manifestations. Hence, the profession is uniquely placed to address addiction due to the variety of roles played by social workers, and the range and scope of interventions utilised (Corrigan, Bill, & Slater, 2009).

Social work services can be therapeutic or statutory in nature, with social workers being mandated to carry out court-ordered investigations and services for persons diagnosed with substance use disorders. This is done in accordance with the relevant legislation, which in the South African context, is the Prevention of and Treatment for Substance Abuse Act, No.

70 of 2008, as well as the Criminal Procedures Act, 51 of 1977 (as amended). Social workers also offer preventive and aftercare services to addicts, either through casework, group work or larger community initiatives. They utilise their group work skills at the level of the institution and at community based services. Groups vary from having a therapeutic goal, to focusing on education about addiction to empowering communities via community action groups.

Social workers are involved at community and societal levels through their participation in Local Drug Action Committees, awareness campaigns conducted in schools and other community based organisations, and their input into the development and modification of social policy regarding addiction. SANCA (South African National Council for Alcohol and Drug Dependence) is mandated by the State to carry out many of these functions (SANCA, 2007). Social work methodology also encompasses supervision and administration and finally, research. Professionals are obligated to be involved in improving their own knowledge and skills through training and research, as well as to disseminate such information.

It is acknowledged that drug use and the pathologies resulting from it are escalating in South Africa (Makuyana, 2013) and that relapse rates are high, suggesting that current treatment programmes are failing to address addiction effectively. Addiction Interaction Disorder (AID) has been proposed as a useful paradigm to understand how multiple addictions combine to compound and exacerbate the addict's experience of his or her addiction. It is "an addiction phenomenon where multiple addictions combine to overwhelm a person by their

complexity and power” (Carnes, 2008, p. 5), and has important implications for treating addiction. If the entire ‘package’ of addictions is not treated, the risk of relapse, either to the drug of choice, or to another mood altering substance or activity, is far greater (Flores, 2004).

Flores (2004) argues persuasively that addicts will continue to substitute different addictions until they are able learn how to develop healthy interpersonal attachments. It is therefore essential to apply research findings in the field of addiction to improve treatment programmes and thereby, it is anticipated, treatment outcomes. The literature, both internationally and in South Africa, notes that there is disconnection and a lag amongst professionals treating addiction in applying current and updated understandings to their treatment programmes (Bowles et al., 2011; Perl, 2011;Toche-Manley, Grissom, Dietzen & Sangsland, 2011). These factors impact upon the efficacy of treatment, and raise issues regarding professional ethics that require a commitment to offering the most efficacious course of action.

Treatment of substance addiction in South Africa prior to 1994 was poorly coordinated and failed to cater for all of South Africa’s population (Bowles et al., 2011). Research conducted in 2010 into the management of registered drug rehabilitation centres throughout South Africa revealed that there was little commitment to apply new knowledge or to introduce evidence-based practice into treatment programmes. None of the centres that participated in this research had any data on treatment outcome or relapse rates (Bowles et al., 2011). Given the context of an escalating prevalence of drug addiction and the new treatment challenges outlined above, it is important that programmes offered by drug rehabilitation centres take into account recent developments in addiction, including MA and AID, and incorporate this

information into their treatment regimes. As a practitioner working in the field of addiction I became increasingly aware of these challenges to effective treatment which resulted in my interest in conducting research into the prevalence and treatment of MA and AID.

### **1.3 PROBLEM STATEMENT**

To date, no research into MA or AID has been conducted in South Africa, with the exception of Bulwer's (2003) research into pathological gambling. Her study assessed for addictions, including substance abuse, eating disorders, sex addiction and co-dependency in addition to the pathological gambling, but not their potential interaction. It can therefore be argued that it is important to establish if the concepts of MA and AID are relevant in the South African context in order to improve current assessment and treatment of addiction. This is necessary because the rising levels of drug use and reported high relapse rates suggested that current treatment methods are not effective and have failed to take into account international findings on the nature of addiction. Rehabilitation centres will continue to provide less than optimal treatment if they do not fully understand the nature of MA and AID.

### **1.4 RESEARCH QUESTION**

Do in-patients who have been diagnosed with a substance use disorder and who have been admitted to three rehabilitation centres in Durban, South Africa, experience multiple addictions and addiction interaction, and do their treatment programmes appropriately assess and manage these issues?



## **1.5 AIMS OF THE RESEARCH**

The aims of the study were:

- To establish if in-patients admitted to three drug rehabilitation centres in Durban had addictions in addition to the substance use disorder for which they had been admitted.
- To investigate the extent of multiple addiction and addiction interaction among in-patients at these centres.
- To determine whether the treatment that the in-patients received assessed for these additional addictions and managed them appropriately.

## **1.6 OBJECTIVES OF THE RESEARCH**

The study objectives were:

1. To understand the profile of in-patients with substance use disorders in Durban, and, specifically, to establish the prevalence of multiple addictions.
2. To investigate the role of family dynamics and trauma in the development of addiction with in-patients assessed as having multiple addictions.
3. To explore experiences of multiple addictions and addiction interaction disorder amongst participants assessed as having gambling and/or sex addiction.
4. To establish their previous treatment exposure and their outcomes.
5. To establish how professional staff employed at in-patient rehabilitation centres understand and currently assess and treat multiple addictions and addiction interaction disorder.
6. To make recommendations regarding treatment of addiction.

## **1.7 PRINCIPAL THEORY UPON WHICH THE STUDY IS BASED**

The literature acknowledges that addiction is a complex issue, transcending the narrow confines of any one specific discipline (Acker, 2010; Shaffer et al., 2004). Furthermore, the field is beset by many competing interest groups (Freed, 2010). There is a concern that current research is confined within different disciplines, with little communication between the researchers, resulting in a lack of coherence in understanding this problem (Oksanen, 2013). I was mindful of these challenges when selecting the theoretical framework that was used to guide my study, and selected the biopsychosocial model which, I believe, provides an holistic paradigm for understanding health in a broad context.

This model was developed from General Systems Theory and presented in 1977 by George Engel who posited that illness or disease needs to be conceptualised on three levels: the biological, the psychological and the social (Engel, 1977). This represented an important paradigm shift away from the dominant medical model that adhered strongly to a linear cause-effect conceptualisation of illness (Garland & Howard, 2009; Hall, 2011). Pilgrim (2011) traces the development of this model from both General Systems' Theory and psychosomatic medicine, and he acknowledges that it has played a major role in combating medical reductionism.

Garland and Howard (2009, p. 191) believe that the biopsychosocial perspective is “the foundation of social work theory and practice”, and that this perspective is well suited to the profession's approach to the human condition. It has been used to study many health conditions, ranging, for example, from diabetes and obesity to chronic pain, to mental health

problems, including depression, schizophrenia and addiction (Pilgrim, 2011). Specifically in relation to addiction, this model has been used in the study of pathological gambling (Griffiths, 2005; Hodgins, Stea & Grant, 2011), sexual addiction (Hall, 2011; Samenow, 2010) and alcoholism (Garland, Boettiger & Howard, 2011).

Pilgrim (2011) is of the opinion that this model is not sufficiently critical of the linear nature of medical diagnosis, most especially mental health diagnoses, and he takes issue with the diagnostic validity of mental health problems. Nevertheless, he asserts that the model is useful and calls for it to be re-invigorated, and not simply accepted in an uncritical fashion. Despite the limitations expressed by Pilgrim (2011), I believe that it is a highly appropriate model to use in the study of addiction. Theoretical models that address addiction need to be able to account for the various facets involved in this disease, ranging from the individual's biology to social policy formulation, and take into account the various role players affected by addiction. These include addicts and their families, practitioners and those researching or developing policy regarding addiction. The literature generally acknowledges that the biopsychosocial model allows for an exploration of the many complex layers of addiction, and it encourages an exploration of the reciprocity between factors, offering a solution to the concern about the lack of inter-disciplinary cooperation in addiction research. A further strength is that it rejects the linear understanding of causality posited by the medical model (Barkley, 2009).

Griffiths (2005, p. 191) emphasises that any theory needs to be “flexible, accountable, integrative and reflexive” and argues that the biopsychosocial model possesses such qualities

to facilitate the study of addiction. He notes that there has been much debate over decades on how best to conceptualise addiction, echoing the critique made by Shaffer et al. (2004) that current theories of addiction are too narrow and focused on specific behaviours, usually drug ingestion, rather than seeing them more holistically, as part of a syndrome. The biopsychosocial model should assist in broadening the focus away from one particular manifestation of addiction, which was one of the aims of my study. Garland et al. (2011) utilised this model to integrate previously discreet theories regarding the causation of alcohol use disorders and to make recommendations regarding more effective treatments. It has also been used to provide an holistic overview of the causes and best treatment options for sex addiction (Hall, 2011) and gambling (Derevensky, 2012).

Samenow (2010) believes that this model is useful in studying sex addiction and forwards three reasons for favouring this model. Firstly, it is not allied to any specific approach to addiction, thereby allowing the researcher flexibility in the study, echoing the views posited by Griffiths (2005) and Shaffer et al. (2004). It also has the capacity to enable a researcher to look beyond his or her field, for example, genetic studies, and incorporate wider elements into the research endeavour. This could play a useful role in countering recent criticisms of the dominance of neurobiology over other equally valid perspectives on addiction, such as understanding social stressors (Acker, 2010; Harris, 2007). In fact, frustration with this dominance led Acker (2010, p. 71) to observe that “neuroscience does not single-handedly unravel the mystery of addiction”. The dominant biomedical model is criticised by these authors as being linear, deterministic and blaming the individual or family for addiction without acknowledging wider social factors that influence health. Secondly, the

biopsychosocial model reduces the stigma inherent in addiction by allowing research to be on a par with the study of any other illness. This is an important issue to consider in this field of study, where there is much shame and secrecy attached to the condition (Herring, 2010). Thirdly, the model should also improve treatment, as it broadens the focus of practitioners to encompass the three dimensions inherent in its structure.

Specifically in relation to this study, this model is appropriate as it encourages an holistic conceptualisation of disease as the biopsychosocial model requires the researcher to take into account all three elements in addiction, as opposed to a narrow focus upon individual pathology, which is necessary for reasons discussed above. On the physical or biological level, there are the anatomical and physiological factors related to the disease. Addiction can have many adverse effects on a person's health. This level also accommodates the aspect of neurophysiology which, it is argued, is vital for an understanding of addiction (Erikson, 2009; McCauley, 2009). The psychological level consists of issues such as motivation, craving (Griffiths, 2005), self-esteem (Flores, 2004), personality functioning, experience of and reaction to the illness, and the use of defence mechanisms to protect the addiction (Twerski, 1997). This framework allows for a thorough exploration of this facet of the illness of addiction. The social level consists of the person's relationships with family, (Olson, 1993, 2011; Bradshaw, 2005) his/her cultural and social milieu (Acker, 2010), and, reciprocally, the influence of the social milieu on the person (Harris, 2007). This level also requires a critical examination of broader social influences, such as poverty, limited access to education and healthcare and lack of employment opportunities (Department of Social

Development, 2012). Each of these three levels interacts with the other two and they all influence and are, in turn, influenced by the other levels.

My research investigated a range of issues regarding addiction: the existence of MA and AID in a population addicted to substances; their experience of their addiction on all three levels, as well as how addiction had been treated. This model helped me to guard against favouring one of the three pillars involved in addiction, by making me mindful of the need to be “flexible, reflexive and integrative” (Griffiths, 2005, p. 191).

Garland and Howard (2009) state that this model reflects social work’s understanding of human beings as being in a complex and dynamic relationship with biological, psychological and social factors which are interrelated. This model seemed appropriate as a theoretical framework for the study of addiction as it is not linear, it is holistic in its approach and it is congruent with the general ethos of the social work profession.

## **1.8 DEFINITION OF KEY CONCEPTS**

The following definitions apply to for this research:

**Addiction:** Addiction is “a compulsive life-denying craving for the effects of a substance or behaviour that takes precedence over life affirming activities” (Krippner & Dunbar, 2011, p. 139).

**Multiple addictions:** refers to the presence of more than one addiction. These addictions can be to substances, processes, relationships or core feeling states (Carnes, 2008). “Each

addiction or deprivation / avoidance has not only unique qualities but also remarkably similar characteristics. Thus the same patterns of loss of control or super efforts to control appear repeatedly driven by the same internal dynamics including shame, escapism, trauma and stress” (Carnes et al., 2005, p. 79-80).

**Gambling Disorder:** “persistent and maladaptive gambling behaviour that disrupts personal, family and/ or vocational pursuits” (American Psychiatric Association [APA], Diagnostic and Statistical Manual, fifth edition, [DSM-5], p. 586).

**Sex addiction:** “...persistent, intense, sexually arousing fantasies and urges, or behaviours that cause clinically significant distress or impairment in at least one important area of functioning” (Hook, Hook, Davis, Worthington & Penberthy, 2010, p. 228).

**Addiction interaction disorder:** “an addiction phenomenon where multiple addictions combine to overwhelm a person by their complexity and power. [A] phenomenon so strong no specific focus is strong enough to escape from it” (Carnes, 2008 p. 5).

## 1.9 SIGNIFICANCE OF THE STUDY

This is the first study conducted in South Africa that has investigated whether people addicted to substances have other addictions. It also explored if the concept of AID has relevance for the South African addict population and if MA and AID are being assessed and treated at drug rehabilitation centres. It is hoped that the research would make the following contributions:

- It could establish if people addicted to substances commonly have other addictions. This could result in important recommendations regarding assessment and treatment practices in rehabilitation centres.
- It could establish if people with MA have experienced any of the ten patterns of AID. This could lead to an improvement in the understanding of the dynamics at play in the development and maintenance of the addict's illness and assist with suggestions for more effective treatment methods.
- The findings could result in more effective training of staff and students in the field of addiction.
- The study outcomes could lead to improvements in policy on the prevention, assessment and treatment of addiction.

## **1.10 OUTLINE OF CHAPTERS**

The thesis is presented in the following chapters:

Chapter 2 reviews local and international literature on the definitions and characteristics of addiction and important factors in its causation, particularly family issues and trauma.

Chapter 3 reviews local and international literature on specific addictions, AID and the treatment of addiction.

Chapter 4 outlines and discusses the rationale for the research methodology employed in the study and describes how the research was conducted.

Chapter 5 presents the profiles of the in-patients obtained from the survey at the three rehabilitation centres and details the prevalence of multiple addictions, specifically sex and



gambling, which were screened in the survey. It addresses objectives one and four of the study.

Chapter 6 presents an analysis of the in-depth interviews with 25 in-patients who were assessed as having MA. It discusses the information obtained from these interviews, exploring how the participants understood the development of their addictions, focusing specifically on the role of the family and trauma. The chapter concludes with an exploration of the participants' addiction to substances. This chapter addresses objective numbers two, three and four of the study.

Chapter 7 discusses the participants' experiences of their sex, gambling and other addictions, ranging from other process addictions, relationships and core feeling states. It addresses objective number three.

Chapter 8 describes the participants' experiences of AID and explores their losses due to addiction, their treatment experiences and concludes by presenting the views of the professional staff employed at the three centres. This addresses objective numbers three, four and five, as well as beginning to address the final objective.

Chapter 9 provides an overview of the research process, notes limitations of the study and highlights the main findings. It then makes recommendations regarding assessment and treatment of addiction (objective number six), the training of professional staff and implications of the study regarding future research and policy.

## **CHAPTER 2**

### **LITERATURE REVIEW: DEFINITIONS, CHARACTERISTICS AND CAUSES OF ADDICTION**

#### **2.1 INTRODUCTION**

This chapter places addiction in a context, and begins with defining the term addiction from a variety of perspectives, in keeping with the biopsychosocial model that guided this study. The literature reviewed in this and the following chapter was conducted to gain a thorough understanding of both seminal and current knowledge and research about MA and AID and enabled me to further refine the issues that needed to be investigated in the present study. The characteristics and rewards of addiction are discussed to provide an overview of this complex illness. The chapter will conclude with a review on what the literature understands as being the major causes of addiction, with a focus on families and trauma, due to the critical contributions that these two elements make to its development.

#### **2.2 HISTORY OF THE USE OF THE TERM ADDICTION**

The term addiction has its origins from the Latin: *addicere*, which means to assign. The word addict comes from an obsolete English adjective, meaning “bound” or “devoted” (Alexander, 2000, p. 503). In Roman society, addiction referred to a legal process whereby a person was formally handed over to a master. This usually arose when a person could not pay a debt and thus lost their freedom to the person to whom they were indebted (Harris, 2007; Kranzler & Ting-Kai Li, 2008). Thus, the history of the word resonates with the common understanding of the term, addiction, which means that a person has surrendered his or her control of self, or he or she is bound to a substance or behaviour (Alexander, 2000). The American Psychiatric

Association chose the term “dependence” over “addiction” in 1980 due to the stigma attached to this term, which was seen as being morally loaded as it involves excessive pleasure-seeking activities. Addicts are consequently stigmatised as being weak willed and bad (McCauley, 2009) and dependence was seen as a more neutral term. This term remained in place until the publication of the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) in May 2013 which revised the term to “substance-related and addictive disorders”. Researchers who advocated the use of “addiction” noted that it was a term that is both accepted and preferred by the mental health care users and many other professional bodies, such as the American Society of Addiction Medicine who advocated the use of this term (O’Brien, Volkow & Li, 2006). This continues to be a heated and controversial debate in the literature and amongst mental health care professionals (Erikson, 2009; Kranzler & Ting-Kai Li., 2008; O’Brien et al., 2006).

Linked to the disagreements regarding terminology is the debate as to whether addiction is an illness, and concerns regarding the application of the medical model which is seen as being deterministic and limiting and failing to take into account the broader social context within which addiction develops (Acker, 2010; Harris, 2007). In this thesis, I have chosen to use the term ‘addiction’ primarily due to the fact that it is the most widely accepted term by all role players.

### **2.3 DEFINITIONS AND CHARACTERISTICS OF ADDICTION**

There is great variety in the definitions of addiction reflecting a variety of epistemologies invested in this field (Freed, 2010). The definitions presented attempt to show this spectrum.

The characteristics of addiction and the criteria used to diagnose this condition are then discussed, paying particular attention to the changes presented in the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5, American Psychiatric Association [APA], 2013).

### **2.3.1 Definitions of Addiction**

A review of the literature indicates that there are many definitions and understandings of addiction. Different authors' definitions reveal a variety in the scope and focus and differing epistemologies that exist in understanding this complex phenomenon. A few pertinent definitions of addiction are:

- "...denotes compulsivity and an absence of fuller psychosocial integration rather than merely an annoying habit contained in an otherwise normal life" (Alexander, 2000 p. 503).
- "An illness in which people believe in and seek spiritual connection through objects and behaviours that can only produce temporary sensations" (Nakken, 1996, p. 5).
- A disorder of attachment, a dysfunctional way of self-regulation through looking for "something 'out there' that can be substituted for what is missing 'in here' " (Flores, 2004, p. 7).
- "A multi-faceted and insidious process of erosion leading to social exclusion. The threshold of addiction is culturally set, dependent on factors such as social values, norms and the law" (Harris, 2007, p. 42).

- “Addiction comes about through an array of neuroadaptive changes and laying down and strengthening of new memory connections in various circuits in the brain...[it] involves inseparable biological and behavioural components. It is the quintessential biobehavioural disorder” (Leshner, 2001, p .75).

Definitions in the literature range from focusing on the role of the brain (biological focus), to the behavioural expressions of addiction and to the existential and spiritual issues presumed to underlie addiction (the psychological dimensions), as well as the social aspects of addiction. Some definitions focus exclusively upon substances, whilst others incorporate the behavioural addictions. There is a need to unite these differing perspectives and give each its due recognition which should result in a more holistic and comprehensive view of addiction (Oksanen, 2013). The biopsychosocial model, in my opinion, has a valuable role to play in offering a framework to achieve this aim.

### **2.3.2 Diagnostic Criteria and Characteristics of Addiction**

Significant changes to the conceptualisation of addiction occurred with the publication of DSM-5 (Peer et al., 2013). Substance-related disorders in DSM-5 are comprised of two categories: the substance use disorders, which will be fully described in the discussion relating to the characteristics of addiction, and the substance-induced disorders which include “intoxication, withdrawal, and other substance/medication induced mental disorders (e.g. substance-induced psychotic disorder, substance-induced depressive disorder)” (APA, 2013, p. 485). Further, the previous distinctions between “substance abuse” and “substance dependence” in DSM-IV were removed and the two were combined into a single disorder, called “substance use disorder” which is part of a new, overarching category referred to as

“substance-related and addictive disorders” (APA, 2013). Substance use disorders refer to “a cluster of cognitive, behavioural, and physiological symptoms indicating that the individual continues using the substance despite significant substance-related problems” (APA, 2013, p. 483). This new category of substance-related and addictive disorders includes gambling disorders (renamed from pathological gambling) and “internet gaming disorder” has been placed in a category of disorders needing further research, but which have the potential for inclusion into future editions of the DSM (Denis, Fatséas & Auriacombe, 2012).

Substance use addictions are measured on a continuum from mild to severe with eleven symptoms listed. The presence of two to three of these symptoms is required to diagnose mild substance use disorder, and four to five for a moderate disorder and six or more to diagnose a severe condition (APA, 2013). A major reason for this realignment of the diagnostic categories was to accommodate individuals, known as “diagnostic orphans” (Proctor, Kopak & Hoffman, 2012, p. 723) who did not meet sufficient criteria for the diagnosis of substance dependence in terms of the criteria in DSM-IV which required the presence of three or more symptoms out of seven. They were, therefore, at risk of not receiving diagnostic coverage for their problematic substance use because their behaviour, whilst problematic, failed to meet the criteria for substance abuse (Peer et al., 2013).

Symptoms are clusters of traits that have been found to be reliable and valid in diagnosing addiction to substances and they are also applicable to behavioural or process addictions, such as gambling disorder (Grant, Potenza, Weinstein & Gorelick, 2010; Frascella et al., 2010) and sex addiction (Garcia & Thibaut, 2010; Grant et al., 2010; Wareham & Potenza, 2010).

A total of eight different process addictions (and three substance addictions) are identified and described based upon a review of 83 studies from 1950 to 2010 (Sussman et al., 2011). This growing awareness of the different facets of addiction has led researchers such as Shaffer et al. (2004, p. 367) to conclude that “each outwardly unique addiction disorder might well be a distinctive expression of the same underlying addiction syndrome”. They make a strong case that addictions should not be seen as discrete entities, but as part of a single syndrome, which is why the introduction of an addictive disorders classification is seen as a major shift in the conceptualisation of the illness of addiction (Peer et al., 2013).

There has been an increasing recognition in the literature that process addictions should be seen as being on a par with substance addiction (Frascella et al., 2010; Sussman et al., 2011). This recognition stems, firstly, from advances in neuroscience which show the same neurochemical processes occurring across the spectrum of addictions which, secondly, present with similar symptoms. Thirdly, treatment approaches (including medication) have much in common, such as the application of the 12-Step Programmes (Flores, 2004). This leads Shaffer et al. (2004, p. 372) to observe that “perhaps our treatments are more advanced than our addiction philosophy” and Schneider to state that “addiction is addiction is addiction” (2005, p. 75).

Not all people who engage in potentially addictive behaviours will cross the line into addiction, but research indicates that 10% of people using substances will do so (McCauley, 2009). Prevalence rates for addictions as they occur in the general population will be discussed later in this chapter. It is now necessary to describe briefly the symptoms or

characteristics of addiction which will provide the context for the discussion of the individual addictions specifically addressed in the present study.

The eleven criteria of addiction listed in DSM-5 are used as the basis for describing the characteristics of addiction (APA, 2013; Goodman, 2009; Sussman et al., 2011). The first three criteria have been taken from the previous diagnosis of substance abuse in DSM-IV (Sadock, Kaplan & Sadock, 2007) and describe the social impact of substance use (Peer et al., 2013). The first is neglect of important role obligations such as school, work or home responsibilities. The second criterion is hazardous use of substances, such as driving under the influence of alcohol. The third involves continued substance use despite the social or interpersonal problems it causes, such as conflict in relationships which Griffiths (2005) notes is an important characteristic of addiction. The fourth criterion, formerly in the substance dependence diagnostic criteria, is also concerned with the social impact of substance use by giving up or reducing “important social, occupational or recreational activities” (APA, 2013, p. 491), such as work and hobbies due to substance use. The fifth criterion is continued substance use despite the knowledge that it causes or worsens physical or psychological problems. The addictive behaviour often persists in the face of catastrophic consequences such as major health problems, loss of employment, imprisonment and the destruction of family relationships.

The sixth criterion is tolerance, where the person needs more of the behaviour or drug to obtain the same effect. Tolerance occurs on a physical level with substances, and drugs can be evaluated in terms of their ability to induce dependence, which will be discussed in Chapter 3, Section 4, as described by Erikson (2009). In process addictions, tolerance



presents as escalation whereby the person engages in a behaviour more regularly and/or with greater intensity to obtain the same mood altering effect (Carnes, 2008). Research into behavioural addictions has found tolerance in sex (Goodman, 2001; Orford, 2000), gambling, (Griffiths, 2005; Hoffman, 2011; Wareham & Potenza, 2010), overeating (Frascella et al., 2010; Orford, 2000; Taylor, Curtis & Davis, 2010) and exercise (Allegre, Souville, Therme & Griffiths, 2006) amongst other behaviours. Linked to tolerance is, seventh, withdrawal where cessation or a reduction of the drug or behaviour results in moodiness, depression, irritability or, in the case of some drugs, physical symptoms, such as delirium tremens with withdrawal from alcohol. Addiction is used to soothe the body, therefore cessation will cause reactivity. Addicts often see stopping the use as being equivalent to death (McCauley, 2009). Research has established that withdrawal occurs in the behaviours listed above (Sussman et al., 2011).

The eighth criterion listed is loss of control, where the person takes the substance (or engages in the behaviour) in greater amounts or for longer period of time than intended. It is also called “compulsive behaviour” (Carnes, 2008; Goodman, 2009) and refers to patterns of behaviour where control is impaired and which extend over time. Twerski (1997) outlines the many rationalisations, referred to as defence mechanisms, used by addicts to justify their continued use of addictive substances or behaviours. He cautions that these explanations can be very plausible, especially in the early stages of the illness. McCauley (2009) describes how addiction erodes the ability of the brain’s frontal lobes to exert appropriate control over thinking and behaviour, a condition referred to as “hypofrontality”. The ninth criterion listed is efforts to stop or to control the addiction which are employed in an attempt to restore some level of order into the person’s life. This is manifested by resolutions to stop drug use or the behavioural problem which invariably fail, with Bradshaw (2005) arguing that this “total

control” behaviour demonstrates the same obsessive qualities as the acting out addictions. This often manifests itself in binge/purge cycles and there appears to be no learning from past experience. Carnes (2008) lists deprivation as one of the rewards of addiction and describes alternating addiction cycles where the person moves between deprivation and bingeing as one of the types of addiction interaction disorder, to be described in Chapter 3.

Loss of time is the tenth criterion in which significant amounts of time are lost due to the addiction; the literature notes that this happens in three different ways. Firstly, time is lost through preoccupation which involves thinking and planning the addictive rituals or, secondly through engaging in the addictive behaviour and, lastly, recovering from its effects. The eleventh symptom is a new addition, and is craving, which has been generally welcomed because it acknowledges the neurological basis of addiction (Hasin, Fenton, Beseler, Park & Wall, 2012), as explained by Griffiths (2005) and McCauley (2009) who note that the drugs or behaviours are “remembered” by the brain as essential for survival via various neurochemical processes and they “hijack” the brain’s other survival priorities. Griffiths (2005 p. 193) refers to this process as “salience” and he states that it accounts for the preoccupation, craving and addictive acting out seen in addicts.

The literature identifies other characteristics of addiction (Goodman, 2001; Griffiths, 2005; Taylor et al, 2010). One is that addiction has a ‘characteristic course’ (Goodman, 2001, p. 197) and that the disease develops progressively in a predictable manner. This development of the illness is documented in alcoholism (Tomberg, 2010), sex addiction (Carnes, 2001; Kafka, 2010) and gambling (Hodgins et al., 2011; Nelson, Gebauer, LaBrie & Shaffer, 2009). Relapse is another important characteristic discussed in the literature. Indeed, relapse rates

for addicts leaving treatment are high, with as many as 90% of addicts relapsing within the first year of leaving treatment (Shaffer et al., 2004). There are challenges to the biomedical model which are critical that it has too narrow a focus upon the individual and that it fails to account for broader social factors that influence health (Acker, 2010; Barkley, 2009; Harris, 2007) and it is important to remain mindful of the social dimensions of health, which is one of the strengths of the biopsychosocial model (Garland & Howard, 2009). Having discussed the characteristics of addiction, it is important to understand the rewards and positive effects that it affords the individual which make it such a potent illness.

## **2.4 THE REWARDS OF ADDICTION**

Addiction, it is argued, results when the person's 'pleasure centre' is rewired to prioritise the addiction over all other activities and commitments in the person's life (McCauley, 2009). The literature lists four rewards of addiction (Becker, Perry & Westenbroek, 2012; Blum et al., 2012; Carnes, 2008; Flores, 2004; Milkman & Sunderwirth, 1987). What they all achieve is "the compelling urge to feel wonderful" (Milkman & Sunderwirth, 1987, p. ix). These rewards are:

- Arousal or pleasure. This reward encompasses using the drug or behaviour to engender feelings of being active, powerful, euphoric, or with an enhanced ability to focus. Stimulant drugs, gambling, risk taking, codependent relationships and criminal behaviour are cited as examples of substances or activities able to produce this effect (Becker et al., 2012; Blum et al., 2012). People seeking this reward do so to mask an overwhelming sense of helplessness and to protect themselves against an environment that they see as frightening (Milkman & Sunderwirth, 1987).

- Fantasy or escape. This reward relates to feelings of unreality and a dream-like state that is obtained through hallucinogens or fantasy-based relationships, for example compulsive romance and internet-based fantasy games. This reward enables the user to avoid feelings of helplessness by escaping into their own reality (Carnes, 2008; Milkman & Sunderwirth, 1987).
- Numbing or satiation. This reward is commonly obtained through the use of depressant drugs, particularly the opiates, through binge or over-eating and excessive television watching (Goodman, 2009). This reward numbs stress and tension and can also protect the person against their own feelings of rage and helplessness. Carnes (2008) argues that there is a strong correlation between persons with a history of trauma and seeking this reward in addiction.
- Deprivation. This is a reward proposed by Carnes (2008), based on ground-breaking research by Huebner published in 1993, which showed that compulsive deprivation can also activate the brain's reward pathways. This gave rise to the "auto-addiction opioid theory" (Ho, Arbour & Hambley, 2011, p. 131) which has been supported by research that demonstrated that self-starvation resulted in endogenous opioids being released resulting in a "high" which can, with repetition, become addictive. Other behaviours can activate this reward pathway for example, compulsively avoiding pleasurable activity, such as not spending money and avoiding sexual intimacy in a manner that is destructive to the person.

Each addiction can yield more than one reward, and the addicts can, within their own unique expression of their illness, use a combination of these rewards to produce powerful mood

altering experiences, thereby avoiding painful issues or conflict. The rewards can occur simultaneously or over a period of time as part of a binge/purge cycle, for example, a person alternately binge eating and starving themselves as described earlier, which Bradshaw (2005, p. 135) calls the “control–release cycle”. Becker et al. (2012) note that there are sex based differences in reasons for the initiation of drug use. In males, drug use usually begins for stimulation and excitement, whereas females are more likely to initiate drug use as self-medication for stress or trauma. The literature is clear that people become addicted to the *effects* of the drug or behaviour, rather than the specific agent of addiction (Blum et al., 2012; Erickson, 2009).

Having examined definitions of addiction and its characteristics, it is important to look at factors generally acknowledged as playing a role in the development of addiction. The range of factors reviewed is guided by the biopsychosocial model that provided the theoretical framework of this study.

## **2.5 IMPORTANT FACTORS IN THE CAUSATION OF ADDICTION**

This section of the review discusses factors acknowledged in the literature as playing a significant role in the development of the illness of addiction. Shaffer et al. (2004, p. 368), utilising the biopsychosocial model, classify causes into three main groups which are firstly, individual vulnerabilities which includes family, trauma, and the social environment. The second antecedent is object exposure, for example, availability of drugs, gambling etc. and the person’s environment is crucial in making the object available and acceptable. The third antecedent is object interaction, which was discussed in Section 2.4 which described the

rewards of addiction from biological and psychological perspectives. This review focuses on the individual vulnerabilities, starting with the family and factors relating to its role in causing addiction, followed by an examination of trauma which plays an important role in addiction, both as a cause and a consequence. Significant gender-based differences have been found regarding the role of trauma in the causation of addiction, as will be discussed (Becker et al., 2012). Finally, I will discuss how the developmental phase of adolescence is, in vulnerable individuals, a major risk factor for developing addiction, and the time when exposure to the last two antecedents of addiction: object exposure and object interaction, occur.

### **2.5.1 The Family's role in Addiction**

The family is generally acknowledged as playing a pivotal role in raising healthy, well-adjusted children (Bradshaw, 2005). Conversely, family pathology is cited as contributing to poor adjustment in individuals (Benzies & Mychasiuk, 2009; Bhana & Bachoo, 2011) and also specifically in relation to the development of addiction (Bradshaw, 2005; Liddle, 2009; Opitz, Tsytarev & Froh, 2009; Sussman, Skara & Ames, 2008). In distilling the information and research available that addresses this topic, four particular issues emerge that link the family and the development of addiction. In conducting this review, I was mindful of the biopsychosocial model that assisted me in maintaining a broad focus on the myriad of issues involved in the family's role in addiction. The four areas range, firstly, from the family's genetic influences, to, secondly, attachment styles that form and persist throughout life, thirdly, the quality of family relationships and, lastly, parental influences which incorporate the roles and circumstances of these caretakers. These factors include broader structural factors such as poverty, unemployment and lack of access to decent housing, healthcare and

education which impact negatively upon the family's ability to nurture its members. Each of these areas, ranging from the biological inheritance, through to the child's ability to develop healthy attachments to the social dynamics inherent to family life and the broader social factors impacting on the family, combine in a complex way either to protect against or increase an individual's susceptibility to developing the illness of addiction.

Carnes (2008) contends that addiction is a family illness and notes that it is essential for the addict to come to terms with family of origin issues, because events from childhood continue to exert a tremendous influence as an adult unless these problems are acknowledged and treated. Many addicts will 'act out' with their addiction in response to painful childhood memories and they could also unconsciously re-create scenarios from childhood. Shame felt from addictive behaviour can connect the addict to shameful childhood memories thereby reinforcing their addictions.

#### **a. Genetics**

Genetics and the precise role played by genetic inheritance remains the subject of much research (Blum et al., 2012; McCauley, 2009; Moussas, Christodolou & Douzenis, 2009). Despite some of the literature being critical of the research methods employed, there is general consensus that genetics contribute significantly to the development of addiction and this could constitute as much as a 60% liability (McCauley, 2009). Specifically, in relation to alcoholism, if a person has one alcohol dependent parent, their risk for developing alcohol dependency is three to four times greater than in the general population (Moussas et al., 2009). Research into disordered gambling has established a link between pleasure-generating activities and a specific gene: D2A (Derevensky, 2012). Carnes' (2008) research found that

87% of the sex addicts surveyed had other addicts in their family of origin. The literature generally concurs that genetics does play a role in increasing the risk of developing an addictive illness.

### **b. Attachment**

This is an area in psychology that has received a vast amount of research and attention, with the work of Bowlby and Ainsworth being acknowledged as forming the foundation of this field of study (Kinniburgh, Blaustein, Spinazzola & van der Kolk, 2005; Peleg-Oren, Rahav & Teichman, 2008). The family is the place where the infant forms his/her first attachments. Secure attachment in childhood is linked to positive developmental outcomes (Goodman, 2009; Kinniburgh et al., 2005) and occurs when caregivers are consistent and able to mirror and contain the child's emotions (Bradshaw, 2005; Flores, 2004). Secure attachment is linked to individuals who are better able to regulate their emotions in childhood and through into adulthood (Zeinali, Sharifi, Enayati, Asgari & Pasha, 2011). Infants who are not adequately nurtured in their families of origin are at risk of forming a disordered attachment style (Zeinali et al., 2011). When caretakers are emotionally inconsistent, absent or unavailable, insecure attachment is likely and the literature identifies four attachment styles, the last three of which are pathological: secure, anxious-avoidant, anxious- ambivalent and disorganised (Flores, 2004; Kinniburgh et al., 2005). Bartholomew and Horowitz (1991) extended this model of childhood attachment patterns and identified four different attachment styles in adults and, again, the first is functional and the last three are pathological. The styles are: secure, preoccupied, fearful and dismissing. It has been argued that these pathological styles are evident in people diagnosed with sex addiction (Fasainder, Taylor & Salisbury, 2012).



Children deprived of consistent nurturing, in addition to developing pathological attachment styles, are not given the opportunity to develop adaptive coping strategies. Hence, they characteristically rely on more primitive coping skills, such as avoidance, aggressive acting out and dissociation (Kinniburgh et al., 2005) which further compromises their potential to develop into healthy, well-adjusted adults (Bradshaw, 2005). Poor parenting results in the child's dependency needs being unmet over a significant time period, placing them at risk for a poor self-image and learning that others are not trustworthy and cannot be relied upon for nurture. A child with a poor self-image and inadequate skills to process emotions is at risk for looking for a 'quick fix' to deal with overwhelming feelings, setting up a vulnerability for addiction (Liddle, 2009). Flores (2004) argues that addiction is a disorder of attachment and states that this inability to form healthy, loving bonds predisposes the child to find other sources of nurture, such as substances, sex and gambling. Research indicates that children from families where fathers abused substances showed significantly higher degrees of insecure-avoidant attachment styles and this attachment style is directly related to family functioning and the emotional availability of the parent (Peleg-Oren et al., 2008). In addition, vulnerable children whose families cannot meet these needs are at greater risk of developing behavioural problems (Zeinali et al., 2011). Poor attachment styles develop within a family system that is, in and of itself, likely to have pathological relationship styles, which is now the focus of this review.

### **c. Family Relationships**

Carnes (2008; 1991) and Bradshaw (2005) argue that family pathology can result in a child feeling unworthy and unlovable which will increase their risk of searching for something to repair this faulty sense of self. Studies into family dynamics link certain pathological

characteristics to the development of addiction (Bradshaw, 2005; Carnes, 2008; Opitz et al., 2009). Liddle (2009) states that an assessment of and treatment of the family is essential in addressing adolescent substance abuse. Many researchers have utilised the Circumplex Model of Family Functioning (Olson, 1993, 2000, 2011) as an accurate way of understanding the family pathology that predisposes the individual to developing addiction.

#### **i      The Circumplex Model**

This model was developed by Olson (1993, 2000, 2011) to evaluate family functioning and it has been widely used by researchers to investigate a variety of mental health issues, including addiction (Carnes, 2008); it has been used in evaluating families from different cultures (Wagner et al., 2010). The Family Adaptability and Cohesion Scale (FACES) derived from this model has been found to be both a reliable and valid tool for assessing family functioning and FACES has been used in over 1 200 published research articles (Olson, 2011). This assessment tool has been revised over time and is now in its fourth version. It was developed by clustering fifty factors that are considered important in the assessment and understanding of family dynamics, resulting in the family functioning being assessed along three dimensions which are adaptability, cohesion and communication (Olson, 2000). The FACES assessment tool assesses families' performance along the first two dimensions and these are represented on a family map. Each dimension is conceptualised as having four levels, giving a total of 16 possible descriptions for family functioning. Within the four levels, the first and fourth are considered to be pathological, as will be described below. Communication is not represented on this map and it is conceptualised as the tool for assisting the family to transform itself, and

Olson refers to it as the ‘facilitating dimension’ and notes that improved communication skills are the basis for improving family relationships (Olson, 1993, p.108).

Research into families of addicts consistently reveals patterns at the extremes of the axes, indicating pathology (Carnes, 2008; Opitz et al., 2009; Tafà & Baiocco, 2009; Wagner et al., 2010).

### *Adaptability*

The first dimension is adaptability which refers to the rules, leadership and roles within the family. Over time, a family should, in general move from being more structured, when the children are infants, to increasingly flexible as the children mature. The pathological extremes of adaptability are rigidity and chaotic. Rigid families are autocratic; rules and roles are rigidly observed and there is little negotiation. Discipline is strictly enforced. In this type of family, the child feels that they can never live up to their family’s high expectations of them. The growing child can learn a pattern of covering up undesirable behaviour and presenting an acceptable front to his or her parents. This is a pattern commonly found in addiction, as noted by Carnes (2008) who found in his research that 77% of the sex addicts he surveyed (n=982) came from a rigid family of origin. Other research utilising the FACES model (Olson, 1993) has replicated Carnes’ findings regarding the relationship between rigidity (particularly in the father) and addiction in female sex addicts (Opitz et al., 2009) and in adolescent boys (Tafà & Baiocco, 2009). Hall and Webster (2007) argue that this rigidity contributes to the child striving for perfection, but always feeling that they cannot attain it.

Chaotic families represent the other problematic style at the end of the spectrum. The functional styles are structured and flexible. In chaotic families there is very little parental authority, discipline is inconsistent and the parenting style is laissez-faire. Rules are unclear, change frequently and roles are poorly defined. There is little accountability in the family, and the parent's lives are frequently unmanageable. In the case of an alcoholic parent, rules change according to the parent's whim and are unpredictable (Hall & Webster, 2007).

### ***Cohesion***

Cohesion is the second dimension and refers to the family's ability to foster intimacy. Olson (1993, p. 105) defines cohesion as "the emotional bonding that family members have toward one another". The literature suggests that cohesion is one of the most important contributing factors to increase the family's resilience (Benzies & Mychasiuk, 2008; Bhana & Bachoo, 2011). The two dysfunctional cohesion patterns are disengaged and enmeshed, with separated and connected representing the functional patterns of emotional connectedness. In a disengaged family, children are never close enough to their caretakers to learn the skills of intimacy. The family members are disconnected emotionally from one another, and there is little communication or common interests to bind the family together. Children do not receive much guidance on important matters and they seldom receive affirmation. Carnes' (2008) research found that 87% of his sample described family relationships as having been disengaged. The family has implicit rules that prohibit free expression

of emotion, which has a long term impact on the child's development (Bradshaw, 2005; Hall & Webster, 2007).

By contrast, enmeshed families have poor boundaries and family activities are paramount with high levels of loyalty being demanded. There is little privacy permitted and family members are highly emotionally reactive to one another. Contact with outside influences is discouraged, and there is generally a "no talk" rule in place to preserve the system's autonomy. This style is commonly described by adult children of alcoholics (Hall & Webster, 2007). At both ends of the cohesion spectrum the child fails to develop a sound sense of self worth and self-esteem. Children are unable to develop appropriate boundaries and sense of personal responsibility which has a major impact on the ability to trust others. Carnes (2008) noted that 68% of his sample described their family of origin as having pathology on both dimensions by being rigid and disengaged.

How do these family dynamics affect the growing child and potential addict? It is noted that any family at the extremes of the Circumplex model will fail to meet the child's dependency needs in a satisfactory manner to enable him or her to develop a healthy self-image. The child will develop a shame-based identity and view him or herself as unacceptable, bad, and unlovable, leading to the development to the addict's core belief system, which is at the heart of all addiction (Branstetter, Low, & Furman, 2011; Hall & Webster, 2007). These beliefs are critical, as they form the basis of the impaired thinking which, in turn, is the springboard for the addict's preoccupation and compulsive acting out. The four core beliefs common to all addictions are (Carnes, 2001, p. 152):

1. I am a bad, unworthy person.
2. No one would love me as I am.
3. My needs are never going to be met if I depend on others,
4. Sex [or one's drug of choice or other behaviour] is my most important need.

**d. Parental influences: Circumstances and roles**

Single parenthood is raised as a risk factor for parenting children (Benzies & Mychasiuk, 2008; Bhana & Bachoo, 2011). Mothers are traditionally the caregiver with whom the child forms his/her first emotional bond and the importance of attachment has been discussed earlier. Mothers have been found to play a significant role in preventing or reducing teen substance use (Branstetter et al., 2011; Tafà & Baiocco, 2009). A healthy relationship with the parents and open communication with them is listed as a protective factor in reducing the risk of drug use in adolescence (Zeinali et al., 2011). Living with a single mother is found to reduce the level of parental monitoring which increases the child's vulnerability to engage in risky behaviours.

Fathers are mentioned in the literature as a significant factor in the development of substance abuse in adolescence (Branstetter et al., 2011; Peleg-Oren et al., 2008). In particular, rigidity on the part of the father was directly related to increased risk taking behaviour in the adolescent (Branstetter et al., 2011; Liddle, 2009; Peleg-Oren et al., 2008; Sussman et al., 2008). Opitz et al. (2009) found that poor bonding with the father was reported by women with sex addiction. By contrast, a close relationship with the father serves as a protective factor for both genders in delaying the adolescent's first use of alcohol and in preventing alcohol bingeing (Tafà & Baiocco, 2009). In addition to these factors, research links early

teenage drug use and gambling to poor parental supervision and poor socio-economic backgrounds (Derevensky, 2012; Habib et al., 2010). Whilst the current study did not specifically investigate the wider social pathologies that impact upon the family's circumstances, they need to be borne in mind, and may be an area for further research.

### **2.5.2 The Role of Trauma in Addiction**

Trauma is listed as a major causative factor in the disease of addiction (Derevensky, 2012; Shaffer et al., 2004; Sussman et al., 2008). In fact, Carnes (2008) argues that addiction should be viewed as a trauma-based illness. Trauma is a specialised field in mental health (Cloitre et al., 2009; C. S. Johnson, Heffner, Blom, & Anthenelli, 2010; Wang et al., 2010) and this review will focus only on information relevant to the present study. Trauma is a term that is somewhat over-used in common speech, to the extent that it has lost a lot of its meaning. It is also frequently used interchangeably with stress, which is incorrect (South African Institute of Traumatic Stress [SAITS], 2005). Psychological trauma refers to exposure to events that significantly impact upon the person's safety, wellbeing or integrity, as opposed to stress that involves the person's coping mechanisms being unable to cope with life's demands.

Traumatic events were first listed in DSM-III in 1980 and included rape, torture, catastrophic natural disasters and war and it was stated that such exposures were rare. However, further research into trauma revealed that traumatic exposures were far more widespread than initially thought (Friedman, 2003), and exposure to an event did not automatically result in post traumatic stress (Friedman, 2003; Kaminer & Eagle, 2010; Sadock et al., 2007). The understanding of trauma shifted in 1994 with the publication of DSM-IV when the list of traumatic events was broadened to include domestic violence and child abuse. The diagnosis

of PTSD has risen by 50% since the definition was modified (Appignanesi, 2008). Kaminer and Eagle (2010, p. 8) reported that the lifetime exposure to one traumatic event in South Africa was 75%, and over 50% of adults had experienced multiple traumas. These findings were made by the South African Stress and Health (SASH) study conducted in 2002 with a nationally representative sample (n=4 351). Research in South Africa amongst university students found that 81% of participants reported some exposure to childhood trauma, with males in the sample having double the risk compared to the females of having been victimised by a community member (Collings, 2011). These local studies contrast with the finding that 50% of Americans reporting having been exposed to one traumatic event (Friedman, 2003, p. 1) and point to the fact that the South African population reports higher rates of trauma exposure than our American counterparts (Collings, 2011).

Important gender differences have also been found in trauma research both internationally and locally with women being far more likely to have been traumatised in the context of intimate relationships than men (Kaminer & Eagle, 2010). Similarly, Collings' research established that women were more at risk to develop symptoms of PTSD, and that exposure to victimisation in the home was the type only of abuse linked to the development of PTSD.

#### **a. Post traumatic stress disorder**

It is understood that not everyone exposed to a traumatic event will develop PTSD (Van der Kolk, Roth, Pelcovitz, Sunday & Spinazzola, 2005). The risk of developing PTSD depends on various risk factors, such as the nature of the event, previous experiences, and individual vulnerabilities, including substance use (SAITS, 2005). Friedman (2003, p. 11) notes that a woman's risk of developing PTSD after a rape is 46% versus 9% after a motor vehicle



accident. Cloitre et al. (2009) state that trauma has a cumulative effect, and that it is commonly found that individuals with PTSD have suffered multiple traumas, as opposed to having had only one trauma exposure. Their research suggests that exposure to different types of trauma, as opposed to lengthy exposure to one type of trauma, is most likely to cause complex symptoms.

Post traumatic stress disorder (PTSD) is a psychiatric condition that has undergone some important revisions in DSM-5 and has eight criteria. Firstly, the person is exposed “to actual or threatened death, serious injury or sexual violation” and this is experienced directly, witnessed, affects a close relative or friend or is exposed to these accounts (DSM-5, APA, 2013, p. 271). PTSD is diagnosed at a minimum of one month post exposure to the traumatic event and it results in “clinically significant distress or impairment” in areas of functioning such as work , social or other important areas of functioning (APA, 2013, p. 272) and the symptoms are not accounted for by the effects of substances or another medical condition.

The four criteria relating to symptoms, are, firstly, re-experiencing the event, such as intrusive memories or dreams. Attempts to avoid remembering the event or stimuli associated with it are the second cluster of symptoms. The third cluster of symptoms are a new addition and are conceptualised as negative cognitions and mood and include “persistent and distorted sense of blame for self or others” (APA, 2013, p. 271), a marked lack of interest in previously important activities and the inability to remember aspects of the trauma. The last group of symptoms relate to arousal, such as irritability and difficulties with sleep or concentration.

The literature distinguishes between exposure to traumatic events as a child, as opposed to as an adult (Cloitre et al., 2009). Childhood exposure to trauma is defined by some researchers as ‘developmental trauma’ (Cloitre et al., 2009; Kinniburgh et al., 2005; Schmidt, Peterman & Fergert, 2013). Of relevance to this discussion and the definition of trauma, is the requirement that the event caused marked distress to the person. Child sexual abuse might not have been distressing to the child at the time (or period of time) during which it occurred. However, when older, the person (now an adolescent or adult) may understand the full implications of what occurred as a child, and re-interpret the childhood abuse. This could then give rise to PTSD (SAITS, 2005). Kaminer and Eagle (2010, p 19) note that South Africa “appears to have disturbingly high rates of childhood sexual abuse” as more than 40% of rape and indecent assault cases reported to the South African Police Services (SAPS) in 2004 were made upon children.

Estimates of the incidence child sexual abuse are difficult to calculate and rates vary due to differing definitions of child sexual abuse and source of data. Incidence rates in South Africa are calculated mainly on statistics collected from SAPS, which probably result in a serious underestimation of the true incidence rates (Mathews, Loots, Sikweyiya & Jewkes, 2007). Estimates of worldwide prevalence range from 7-36% for girls and 5-10% for boys and it is believed that child sexual abuse affects many children in Africa, although no exact figures are available (Mathews et al., 2007).

Research has highlighted the potential long term damage that trauma causes to children (Sar, 2010). There are many reasons for this, but a major issue is the vulnerability of the child’s developing brain (van der Kolk et al., 2005). Another important factor in trauma is that it

affects the child's ability to regulate emotions and the dysregulation causes many problems in different spheres of the child's life: "cognitive, affective, behavioural, physiological, relational and self-attributional" (Kinniburgh et al., 2005, p. 424). Problems in the ability to regulate affect can result in the child either being 'shut down' emotionally, or labile, or aggressive (Kinniburgh et al., 2005). Trauma researchers recommend a broadening of the understanding of trauma and its sequelae, as the symptoms displayed by individuals exposed to chronic interpersonal trauma are not adequately explained by PTSD (Sar, 2010; Schmid et al., 2013). Trauma (like addictive behaviours) distorts the child's developmental path, resulting in a focus upon survival, as opposed to learning and acquiring new skills. The literature on developmental trauma states that "the effects of neglect, maltreatment, and abuse are noticeable which has prompted the need for a diagnosis capable of creating the connection between developmental and psychopathological aspects" (Schmid, et al., 2013, p. 1). It is also argued that the damage done by trauma persists and changes presentation throughout life. This "typical pattern of successive disorders" could present as regulatory disorders in infants (e.g. severe tantrums), attachment disorders in preschool children, conduct disorders in the school age child, substance abuse in adolescence and ending with diagnoses of personality disorder in adulthood (p. 2).

#### **b. The relationship between trauma and addiction**

The literature identifies four issues in this relationship that are relevant to this study. The first is an enquiry into the causal relationship between trauma and addiction. Trauma generally precedes addiction, but, once a person is addicted to substances or processes, their behaviour places them at risk for further traumatising (Driessen et al, 2008; Kingston & Raghavan, 2009; Sar, 2010; van der Kolk et al., 2005). Research into people diagnosed with addiction

finds significant correlation between childhood sexual abuse (a form of trauma) and sex addiction in women (S. Johnson, Cottler, O’Leary & Abdallah, 2010). The rate is not as high in male sex addicts (Opitz et al., 2009). Rates of trauma exposure and PTSD are significantly higher in people with substance use disorders (Carnes, 2008). Prevalence rates of PTSD in the general population in the USA are about 9–15% (Friedman, 2003; C. S. Johnson et al., 2010; Wang et al., 2010) and people with substance abuse have been found to have consistently higher rates of PTSD than people without substance abuse. Driesen et al. (2008) found that 25% of their sample of substance dependent respondents had PTSD. Further, persons with a history of poly-substance abuse had consistently higher rates of PTSD than those who solely abused alcohol (Driessen et al., 2008; Sadock et al., 2007). Wang et al. (2010) conducted research amongst heroin users in China and found that 80% of them reported childhood trauma, as opposed to research which found much lower rates in the general population of 0.1% amongst Chinese factory workers.

The second issue is gender differences in respect of childhood trauma. Most studies report that, in the general population, women are diagnosed with higher rates of PTSD than men (C. Johnson et al., 2010). This finding is also replicated in women who abuse substances (Driessen et al., 2008; S. Johnson et al., 2010). Other research established that women reported higher rates of trauma exposure, but only in terms of childhood exposure (C Johnson et al., 2010). Other research noted gender differences in childhood trauma with more females reporting sexual abuse, but more males reporting physical abuse and general trauma (Collings, 2011; Wang et al., 2010). Becker et al. (2012) state that significant sex differences are found in the development of addiction with women more likely to initiate drug use due to stress or trauma. They argue, further, that because women enter the addiction spiral already

burdened neurologically due to trauma or stress, they are more vulnerable to develop addiction and that the illness would progress more rapidly. This has important implications for the assessment and treatment of addiction, which will be discussed in the analysis of the in-depth interviews.

The third aspect of the complex relationship between trauma and addiction is that persons with PTSD have both a poorer response to treatment and prognosis than people without PTSD (Sadock et al., 2007). It is essential therefore that trauma be identified and addressed as part of the treatment process to improve outcomes of the rehabilitation process.

The last issue regarding trauma is that it can negatively affect the survivor's ability to form healthy relationships. Trauma survivors are at risk of forming destructive relationships that unconsciously re-create the dynamics from the original trauma. Carnes (1997, 2008) lists eight specific ways that trauma can impact upon relationships, ranging from avoidance patterns (seen in abstinence, blocking and splitting) to re-enactment patterns (seen in repetition, reaction, arousal, shame and bonding). The trauma affects the person's ability to form healthy relationships and increases their vulnerability to addiction, including relationship addictions which re-create the original trauma. Further, unresolved trauma can colour the person's self-image, making them feel shameful and unlovable and forming the first step in the addict or co-addict's core belief system that they are bad and unworthy.

### **2.5.3 Adolescence**

Adolescence begins at approximately 12 years and ends at 19 years (Sadock et al., 2007). It is characterised by rapid physical growth, sexual and cognitive maturation and during this time

the adolescent strives to establish themselves as an autonomous being, increasingly independent from their family. It is a time of experimentation and exploring new roles and behaviours. Risk taking behaviours increase and are normal (Liddle, 2009). Riggs and Greenberg (2009) contend that the pattern of neurocognitive development enhances the adolescent's vulnerability to substance misuse. The regions of the brain that perceive reward, pleasure and new experiences mature far sooner than those governing higher order decision making and behavioural self-regulation. This combination accounts for the increase in risk taking behaviour and the poor understanding of consequences typical of adolescents (Sadock et al., 2007). The literature argues that substance use can severely distort normal development and is far more harmful for adolescents than for adults (Sussman et al., 2008; Branstetter et al., 2011; Peleg-Oren et al., 2008).

Six specific factors are identified in the literature which differentiate between substance abuse in adults and teenagers, and make it clear that engaging in addictive behaviour as a teenager is more likely to lead to addiction. Firstly, due to the rapid brain growth occurring in adolescence, *any* use of chemicals that affect the central nervous system has the potential to cause harm (Riggs & Greenberg, 2009; Liddle, 2009). Secondly, dependence develops far more quickly in teenagers, who, thirdly, are less likely to seek treatment and have a poorer response than their adult counterparts. Fourthly, patterns of substance abuse vary between adults and teenagers; the latter are more likely to engage in binge behaviour which is known to be very damaging (Riggs & Greenberg, 2009). Fifthly, teenagers show higher rates of dual diagnosis with 75 % versus 66% of adults presenting with this problem (Sussman et al., 2008 p. 1806). Dual diagnosis refers to “the presence of an additional psychiatric diagnosis in addition to a [substance use] disorder” (Sadock et al., 2007 p.397) and it is known to

complicate treatment and is associated with a poorer treatment outcome (Tomberg, 2010). Finally, teenagers are more negatively affected by substance use because it prevents or reduces their vital developmental work and acquisition of life skills. Many drop out of school or tertiary training due to their developing addiction (Liddle, 2009).

The biopsychosocial model provides an integrative and holistic framework to conceptualise risk factors that make adolescents vulnerable to addiction and this framework has been used to enhance the understanding of the development of addiction (Derevensky, 2012; Shaffer et al., 2004). These factors exist on individual, family and community levels. On the individual level, risk factors for adolescents abusing substances are having problems with aggression and acting out, being rebellious and having a personality that is extraverted and sensation seeking (Derevensky, 2012). Other risk factors include problems with anxiety and depression, a favourable attitude towards drug or alcohol and a lack of involvement in religious activities (Liddle, 2009; Branstetter et al., 2011). Family risk factors have been discussed previously. Peer groups have been found to be the most influential factor in starting drugs (Branstetter et al., 2011), although continuing the drug use is more an issue relating to parental control and the quality of the relationship with the parents (Branstetter et al., 2011; Peleg-Oren et al., 2008; Sussman et al., 2008). Community risk factors relate to the availability of substances, chronic poverty and unemployment, a poor school environment and exposure to gangs or deviant peer groups (Harris, 2007; Liddle, 2009; Wagner et al., 2010). To use the model of addictions developed by Shaffer et al. (2004), exposure to and interaction with the object of addiction, e.g. drugs, gambling or pornography, has to occur before the individual can develop the illness.

The literature, both locally and internationally has found that initiation into drug use generally proceeds from cigarettes and alcohol, to dagga and then inhalants (Liddle, 2009; Sargent, Tanski, Stoolmiller, & Hanewinkel, 2010; Shaffer et al., 2004). Adolescents typically initiate drug use with either cigarettes or alcohol, known as “gateway drugs” (Patrick et al., 2010, p. 657) before trying other substances. However, Patrick et al. (2009) found that South African adolescents were more likely to report having tried cigarettes than American youth, but less likely to report using alcohol or dagga. Fewer South African teenage girls reported experimentation with drugs compared to their American counterparts but generally, once using drugs, South African youth showed “somewhat accelerated substance use trajectories between eighth and ninth grades as compared to adolescents in the United States” (p. 655). This finding was for the 14 to 15 year old age groups which were identified by the researchers as being a vulnerable group for initiation into substance use (Patrick et al., 2009).

Adolescents must be seen as more vulnerable than either adults or children to experience negative consequences from exposure to drugs, due to the growth and changes in their brain. The increasing independence of the adolescent gives them more freedom to experiment with different and potentially addictive objects and to embark on the journey of addiction.

## **2.6 CHAPTER SUMMARY**

This chapter presented an overview on the history of the term addiction and provided a range of definitions, reflecting the variety of paradigms that have a stake in this complex issue. These definitions differed in focus from the biological, to the psychological and to the social.



The characteristics of addiction were reviewed, followed by an explanation of the four rewards of addiction. The characteristics listed are derived from work on chemical addictions as defined by the DSM-5, but are applicable across a range of addictions, which is the focus of current research. The most important factors involved in the causation of addiction were then reviewed with a focus placed upon two elements: the family and the many ways in which it influences the development of addiction and secondly, trauma. The literature is clear that addiction and trauma share a complex relationship, and this was critically discussed. The individual's vulnerability to developing addiction is increased with greater exposure to a range of risk factors. It is now necessary to establish what forms addiction can take and the next chapter discusses the different manifestations.

## **CHAPTER 3**

### **LITERATURE REVIEW: MULTIPLE ADDICTIONS, ADDICTION INTERACTION DISORDER AND TREATMENT**

#### **3.1 INTRODUCTION**

This chapter discusses the literature that addresses the different manifestations of addiction focusing upon substances, gambling and sex which are the most widely recognised addictions (Carnes, 2008; Orford, 2000) and were explored in both the survey and in-depth interview phases of the research. Other addictions are also briefly described: these were examined during the interviews with mental health care professionals and during the in-depth interviews. The biopsychosocial model that guided this study is widely used in the study of addiction, and will be utilised in discussing the different addictions (Derevensky, 2012; Samenow, 2010). The concept and characteristics of addiction interaction disorder are then discussed and the chapter concludes by reviewing information on treatment of addiction and relapse rates.

#### **3.2 THE FOUR CATEGORIES OF ADDICTION**

Carnes (2008) lists four categories of addictions. Each category can produce one or all of the four rewards as described in Chapter 2. The first two categories, substances and processes, are commonly listed in the literature as addictions (Frascella et al., 2010). The third category, relationship addictions, is listed by other authors as an addiction (Beattie, 1989; Bradshaw, 2005; Bulwer, 2006; MacLaren & Best, 2010). The last category, core feeling states, is listed by Carnes (2008) and Bradshaw (2005) who state that intense emotions form a vital part of

the addictive process as a fuel and trigger for other addictive patterns and as a powerful tool in altering mood. They also form part of the addiction patterns and mindfulness of the mood-altering quality will assist in more effective treatment (Carnes et al., 2005).

Carnes (2008) and Milkman and Sunderwirth (1987) are of the opinion that it is the ability of the drug or other addictions (e.g. sex, money, co-dependency, intense feeling states) to access the person's unique "soul window" that accounts for the combination of addictions that are unconsciously selected by the individual. This "soul window" is unique to each person and it is made up of the feelings of emptiness, the unfinished and the childhood wounds that everyone carries. The addictions promise to "fix, to heal, to resolve or make up for what has happened" (Carnes, 1997, p. 49). Each category is described here very briefly and a fuller discussion will take place later in the chapter.

- **Substances:** these include legal and illegal substances, and their effects range from excitement, relaxation, euphoria or distortion of the perception of reality. This is the category of addictions that is most readily recognised by the public and by some professionals (Erikson, 2009; Frascella et al., 2010).
- **Process addictions:** these include gambling, sex, love, compulsive debting and spending, excessive exercise, compulsive working and internet (including on-line gaming) (Fracella et al., 2010; Sussman et al., 2011).
- **Relationships:** pathological relationships are used to achieve any of the four rewards of addiction described earlier. These include co-dependence, trauma bonding, co-sex addiction and compulsive romantic attachments (Bulwer, 2006; Carnes, 2008; Doweiko, 2006; Flores, 2004; Milkman & Sunderwirth, 1987).

- **Core feeling states:** these are very powerful emotions that can act as triggers for addictive acting out and include anger, rage, misery, guilt, despair and risk or intensity (Bradshaw, 2005; Carnes, 2008).

### 3.3 MULTIPLE ADDICTIONS AND ADDICTION INTERACTION DISORDER

Carnes (2008) traces the history of the study of multiple addictions (MA), and emphasises that it is not a new topic. He states that the first publication on this issue was in 1977 by W Miller in his *“The addictive behaviours: treatment of alcoholism, drug abuse, smoking and obesity”*. Schneider (2005) credits Carnes for his groundbreaking research, published in 1991 *“Don’t Call it Love”* in which the behaviours of 943 sex addicts were studied and found that 83% of the participants had more than one addiction, with 43% reporting a co-existing chemical dependency (Carnes, 1991). Carnes et al. (2005) proposed the concept of addiction interaction disorder based on research with 650 sex addicts between 1999 and 2003. They established that multiple addictions combine and develop an internal logic and interact in particular ways to produce a pattern unique to each person. The resultant addiction is more complex than the sum of its different individual components. Most of the literature reviewed acknowledges the shared neurobiological substrates for addiction, including substances and behaviours (Blum et al., 2012; Frascella et al., 2010; Wareham & Potenza, 2010).

A comprehensive meta-analysis of 83 studies on multiple addictions and their concurrence rates was conducted by Sussman et al. (2011), who evaluated 11 addictions and concluded that the rates of co-occurrence ranged from 50% to 20%. MacLaren and Best (2010, p. 252)

noted that clusters of co-addictions usually occurred within either a “hedonistic” group, such as substances, gambling and sex versus “nurturant” group such as compulsive shopping, exercise, eating disorders and co-dependent relationships and they emphasise that it is important for both clinicians and researchers to be mindful of the existence of multiple addictions.

The only local research that makes mention of multiple addictions was that conducted by Bulwer (2003, 2006). In her research with 100 pathological gamblers in South Africa, she established that some of her sample had other addictions: 30% had alcohol abuse problems and 6% and 3% reported issues with illegal or prescription drugs respectively. Regarding other process addictions, 12% reported compulsive eating, 13% compulsive spending and 11% compulsive sexual behaviour. She also found high rates of codependent relationships in her sample (although no percentage was given) and 49% had received treatment for co-occurring psychiatric disorders, most commonly depression, which was reported by 38% of her sample. The review now explores the different addictions to establish how they are understood by the current literature and research.

### **3.4 SUBSTANCES**

“The use of psychoactive drugs is as old as pre-history itself...[and] can be dated back to at least the Palaeolithic period, where opium, cannabis seeds and the hallucinogenic fungus ergot have been found in cave dwellings” (Harris, 2007, p. 1). Harris explains further that there are over 1000 plants that have mood altering properties. What is new, however, is that

“mass production and distribution have spread every drug to every corner of the world” (Harris, 2007, p. 5). Drugs are thus ironically more available with fewer social controls than at any previous time in our history (Alexander, 2000) and South Africa is no exception to this experience (Parry et al., 2009; van Heerden et al., 2009). An epidemiological study group was founded in 1996 in South Africa to track trends in drug use, known as the South African Community Epidemiology Network on Drug Use (SACENDU) and this network publishes regular updates that monitor drug use trends of people admitted at different treatment centres throughout South Africa (Dada et al., 2012; Parry et al., 2009; Wechsberg et al., 2009). Prior to its’ establishment, data on drug use trends were very limited and derived from police statistics, school surveys and/or mortuaries and data were often derived from one location, making information on drug use trends prior to the establishment of SACENDU limited in value (van Heerden et al., 2009). The SACENDU studies confirm that the range and availability of drugs has increased rapidly since 1994 when South Africa became more involved in and accepted by the international community. The four most commonly abused drugs in KwaZulu Natal (KZN) as reported by SACENDU in 2011 (n= 1330) were alcohol, dagga, heroin, including Whoonga, and fourthly, cocaine and crack cocaine (Dada et al., p. 6). A national household survey revealed alcohol as the most commonly reported drug used, at 38.7% of households surveyed, followed by tobacco (30%) and dagga (8.4%). Coloured and whites were the racial groups most likely to report substance use, and more males than females reported this behaviour (van Heerden et al., 2009).

Erikson (2009, p .47) states that drugs differ significantly in their “dependence liability”, which refers to their ability to induce addiction (see Table 3.1). This liability interacts with

the genetic, neurobiological and environmental vulnerabilities of the individual to produce their unique potential for addiction. Erikson (2009) states that whilst the effect of the drug is important to consider when understanding why a person is addicted to a drug, a more potent factor is the interaction of that particular drug with the person's unique neurochemistry which is influenced by their genetic inheritance, history of trauma and other factors as outlined in Chapter 2. Poly-substance use has emerged over the past 20 years as a factor that makes the course of the illness and its treatment more complicated (Flores, 2004). Dada et al. (2012) found that rates of poly-substance abuse ranged from 20% in the Eastern Cape to 65% in KZN. The table below depicts the likelihood of a particular drug producing addiction in a person exposed to it.

**Table 3.1 Depicting Drugs and Dependency Liability**

Drug	Proportion of users who develop dependence over time
Nicotine	32%
Heroin	23%
Cocaine	17% (crack cocaine 20%)
Alcohol	15%
Stimulants (other than cocaine)	11%
Analgesic drugs (powerful opioids)	9%
Cannabis	9%
Sedatives	9%
Psychedelics	5%
Inhalants	4%

(Erikson, 2009, p. 47)

The literature has different classifications for drugs of abuse (Erikson, 2009; Parry et al., 2009; Sadock et al., 2007). They can be divided according to whether they are legal or illegal, or according to their pharmacological action which is the classification system that I have used. In this typology, drugs are classified according to their action on the brain (Sadock et al., 2007; TT Ranganathan Clinical Research Foundation, 2004).

The drugs within each category represent those that are legal (such as alcohol, cigarettes and caffeine), controlled (such as prescription medication) and illegal (such as heroin and cocaine).

- Narcotic analgesics include opium, morphine, codeine, heroin and methadone (the latter is used to treat heroin dependence). Whoonga, also known as Sugars is a mixture of heroin and different compounds, such as cocaine, dagga and strychnine. It has been identified as an emerging problematic drug trend, especially in KZN (Parry et al., 2009). The immediate effects of narcotic analgesics include euphoria, drowsiness and suppression of pain and hunger. Tolerance develops rapidly and withdrawal symptoms include agitation, bodily aches and diarrhoea.
- Stimulants include amphetamines, including methamphetamine (known as 'tik' in South Africa), diet tablets, Ritalin, Ecstasy, cocaine and crack cocaine. 'Tik' is identified as a major problem in Cape Town and the Western Cape, especially in-patients under the age of 20 years and increased tik use in Gauteng and Port Elizabeth has also been reported recently (Parry et al., 2009; Dada et al., 2012). Cocaine, particularly crack cocaine, is emerging as a problem substance in South Africa as both a primary and secondary drug of abuse (Parry, Plüddemann, & Myers, 2007). The short term effects of stimulants include euphoria, increased energy levels, decreased



- appetite and need for sleep. Caffeine and nicotine are also classified as stimulants. Tolerance to stimulants develops rapidly and withdrawal is experienced as feelings of depression which can be severe, a lack of energy and motivation, and disturbed sleep.
- Depressants include alcohol, benzodiazepines (minor tranquilizers such as Valium and Ativan), sedative-hypnotics (sleeping tablets including Mandrax) and barbiturates. These drugs produce feelings of euphoria, reduction of stress and tension, disinhibition and they can induce sleep. Withdrawal from this category of drugs is the most medically dangerous and epileptic seizures are possible. Other symptoms of withdrawal include tremors, irritable mood and insomnia.
  - Hallucinogens distort perceptions and produce feelings of expanded consciousness. This category of drugs contains both natural drugs, such as magic mushrooms, nutmeg and mace, and synthetic drugs, such as LSD. Withdrawal symptoms are not reported for this class of drugs. This category of drugs is not widely abused in South Africa, for example, 25 out of 2786 people in Gauteng reported using LSD in a nationwide study of people admitted for in-patient treatment in 2011 (Dada et al., 2012, p. 5).
  - Cannabis, known as dagga in South Africa, is ingested in various forms and it produces mild euphoria, feelings of relaxation and distortions of perceptions. Withdrawal symptoms can include irritability, poor sleep and depression. It is the second most commonly reported drug of abuse in South Africa and is the most commonly reported drug of abuse amongst patients under the age of 20 years (Dada et al., 2012). Dagga is commonly smoked with Mandrax, a practice unique to South

Africa, and this is known as a ‘white pipe’. Mandrax is not commonly reported as a primary drug of abuse and it is used more by males than females (ibid).

- Volatile solvents include glue, solvents and petrol. Their short term effects include euphoria, hallucinations and drowsiness. Withdrawal symptoms are not commonly reported (Sadock et al., 2007). Research, both locally and in the US, indicates that solvent use in adolescence indicates a high risk for the development of substance use disorders and there is concern that this category of drugs is frequently overlooked in research into trends of drug use (Patrick et al., 2009).
- Other drugs of abuse: these refer to other medical drugs such as antihistamines and anti-inflammatory drugs.

All of these drugs have the potential to cause long term damage to different organs in the body, depending on the type of drug used, method of administration, as well as the duration and intensity of use. It is beyond the scope of this discussion to detail specific long term effects of the drugs, but research has established that alcohol is the most damaging drug of all, followed by heroin, and then crack-cocaine (Nutt, 2010).

### **3.5 PROCESS ADDICTIONS**

This part of the literature review pays special attention to gambling disorders and sex addiction, as they were the two addictions screened in the general survey. The discussion also briefly describes the other process addictions which were explored during the in-depth interviews with selected participants as well as with the professional staff. The

biopsychosocial model has been found to be very helpful in understanding the development and manifestations of sex and gambling addictions (Derevensky, 2012; Samenow, 2010).

### **3.5.1 Gambling disorders**

Gambling disorders were defined in Chapter 1 and its' hallmark is the profound disruption that it causes in the individual's life, as with all addictions (Ashley and Boehlke, 2012). It is noted that gambling is an activity as old as humanity (Bulwer, 2006; Hoffmann, 2011; Orford, 2000). The oldest six sided dice has been dated back to 3000 B.C. and there was concern in Ancient Rome about the gambling excesses of several emperors, including Nero and Caligula and Western Europe promulgated legislation as early as the fifteenth century to control gambling (Hoffmann, 2011). Ashley and Boehlke (2012) note that gambling became far more visible and accessible during the twentieth century, with a corresponding rise in problems associated with it.

In South Africa, gambling was illegal up until 1994, with the exception of horse racing, and casinos were allowed in the apartheid 'homelands' (Bulwer, 2006; Peltzer et al., 2006). Since the advent of democracy in 1994, the number of casinos increased from 17 to 31 and other forms of gambling, such as lotteries and slot machines, were legalised. Gambling has become a socially acceptable past time in South Africa, with the most popular form of gambling being lottery tickets, followed by slot machines, scratch cards and horses (Bulwer, 2006, p. 2). It is estimated that South Africans spent R257.6 billion on gambling in 2011, with an average per capita expenditure for adults being R8 000 for 2011 (Pricewaterhouse Coopers, 2012, p. 11). Revenue from gambling are an important source of income for

governments world-wide, with the South African government receiving R1.8 billion in tax revenue from gaming in 2011 (Pricewaterhouse Coopers, 2012).

Concern about the habit-forming qualities of gambling existed in medical literature from the early 1800s, but it was only in 1977 that it was formally listed as a disorder in the ninth edition of the International Classification of Diseases (ICD) published by the World Health Organisation (Slutske, Zhu, Meier & Martin, 2011). In 1980, Pathological Gambling (PG) was included in the DSM-III and, as with the International Classification of Diseases [ICD], both classification systems presented the symptoms of PG in an atheoretical manner, listing only behavioural and objective symptoms as criteria without speculation regarding the aetiology of gambling disorders (Hodgins, Stea, & Grant, 2011). The symptoms of PG have undergone three revisions in the DSM since this first publication, shifting from symptoms that focused mainly on legal and financial problems associated with gambling in DSM-III (Ashley & Boehlke, 2012) to adopting criteria that are similar to those of substance dependence in subsequent revisions (Slutske et al., 2011).

PG was a medically defined disorder and classified as an impulse control disorder, along with pyromania, trichotillomania (compulsive hair pulling) and kleptomania. It has now been re-classified, along with substance use, in a new group of disorders known as “Addiction and related disorders” in the DSM-5 (APA, 2013). It has been re-named “gambling disorders”, incorporating pathological and problem gambling and the term “pathological” has been removed from DSM-5 to reduce stigma (Denis et al., 2012). The literature generally identified two levels of gambling, viz. problem and pathological gambling. The former refers

to gambling that is seen as being less severe than its pathological counterpart, but, nevertheless affected the person's daily living (Jamison, Mazmanian, Black & Nguyen, 2011). Ashle and Boehkle (2012) note that, in practice, the terms pathological and problem gambling were frequently used interchangeably and that both terms referred to gambling behaviour that had a disruptive effect on the person's life. Problem gambling is usually the category of gambling referred to in prevalence surveys (Bellringer, Abbott, Coombes, Garrett & Volberg, 2008). Most of the screening instruments developed to detect disordered gambling utilised the criteria in the DSM-IV (Hodgins et al., 2011) and they will be reviewed in Chapter 4 when the selection of the screening instrument for gambling is discussed. Problem gambling will be term used when presenting the results, as this was the gambling disorder measured by the test administered in the study.

There are three elements to gambling. Firstly, a person places a bet which involves either money or an item of value. Secondly, once placed, the bet is irrevocable and, thirdly, the outcome relies purely on chance (Ladouceur, 2004). Ladouceur examines gambling from the perspective of cognitive distortions, in that the person placing the bet believes that he/she has a system to overcome the odds, which is illogical. Estimates for the incidence of pathological gambling are 1-2% in the general population, although some recent studies suggest a lower prevalence rate (Nelson, Gebauer, LaBrie, & Shaffer, 2009). By contrast, Wareham and Potenza (2010) argue that gambling problems could be underreported as they are not regularly assessed for in populations diagnosed with other mental health illnesses and this could have important implications for effective treatment. Sussman et al. (2011) estimated that the rate of problem gambling is 2% in the general population, but that the rate is higher

in certain ethnic groups, such as the Aboriginal population in North America. Estimates of problem gambling in South Africa vary, and there is limited research into this aspect (Bulwer, 2006; Peltzer et al., 2006). Nevertheless, the research that has been done indicates that while prevalence of pathological gambling is similar to international levels, the proportion of pathological gamblers to regular gamblers in South Africa is 50% higher than in developed countries (Bulwer, 2006). Bulwer (2006) attributes this to the absence of a welfare state in South Africa resulting in people having less of a safety net to cushion them against poor financial decisions; as a result, they are at risk of experiencing more severe consequences from their gambling disorders, and hence, manifesting more symptoms associated with this condition. The Casino Association of South Africa estimates that 4.7% of people using casinos are pathological gamblers, with a higher (but unspecified) percentage of people who use informal or illegal gambling facilities having a problem with gambling (Casino Association of South Africa, 2011).

The symptoms for gambling disorders are modified from those for substance dependence (Strong & Kahler, 2007; Wareham & Potenza, 2010). A diagnosis of a gambling disorder is made when four or more of nine symptoms are present, and the behaviour is not better understood as part of a manic episode (DSM-5, APA, 2013). Four of the symptoms listed are similar to substance use disorders. They are tolerance, withdrawal, impaired control and fourth, loss of relationships, employment or other social support due to gambling (Nelson et al., 2009). The remaining five criteria are deceiving others about the gambling, 'chasing losses'; preoccupation with different aspects of gambling, relying upon others for money for gambling or to settle debts incurred, and, lastly, using gambling to escape problems (APA,

2013; Denis, Fatseas & Auriacombe, 2012). The criterion of committing criminal acts to fund gambling was dropped from the revised DSM-5 as this was not seen as a diagnostically valid criterion (Hodgins et al., 2011). There is criticism that all of the symptoms of PG (in the DSM-IV) are accorded equal weight in making a diagnosis, whereas some symptoms are more indicative of a serious problem. Lying and loss of control, it is argued, are two symptoms that indicate a more severe level of PG whereas preoccupation and chasing losses are more usefully seen as 'gateway' symptoms and are not as predictive of PG the first two listed (Nelson et al., 2009). No weighting of criteria has occurred in the DSM-5, so the same critique would remain valid.

The literature on gambling acknowledges co-occurring addictions, most commonly substance abuse (Wareham & Potenza, 2010) but also co-dependent relationships and sex addiction (Bulwer, 2006). A meta-analysis of co- addictions found a high co-occurrence between pathological gambling and cigarette use (50%); alcohol use (30%), and a 20% co-occurrence rate with the other seven addictions, including illicit drugs, sex, love and shopping (Sussman et al., 2011, p. 31). Research into national co-morbidity of mental illness conducted in the US suggested that pathological gambling often precedes the onset of substance use disorders, rather than developing later (Hodgins et al., 2011). Research by Jamieson et al. (2011) distinguished between individuals with a primary addiction to gambling (called primary gamblers) versus those whose primary addiction was to substances. Primary gamblers were more likely to be female, older, better educated and employed or retired than secondary gamblers. A gender difference was also observed in that female gamblers are more at risk for a co-occurring diagnosis of a mood disorder, in contrast to males who were more likely to

have a substance use disorder. Derevensky (2012) notes that the biopsychosocial model has been extremely helpful in broadening the focus of research in gambling and assisting in examining the complex interactions that occur in the three levels leading to a more nuanced conceptualisation of gambling disorders.

### **3.5.2 Sex Addiction**

As with gambling and substances, descriptions of excessive and problematic sexual behaviours date back to antiquity (Garcia & Thibaut, 2010). In modern times, Kraft-Ebbing described several cases of abnormal sexual desire in the late nineteenth century and much of Freud's writing dealt with problems relating to sexuality (Carnes, 2008; Sadock et al., 2007). In 1948, Kinsey pioneered the scientific measurement of what constitutes normal sexual behaviour. Orford (1985) was the first researcher to conceptualise excessive non-paraphilic behaviour as an addiction in his publication, *Excessive appetites: A psychological view of addiction* (Carnes, 2008).

There is considerable debate in the literature regarding the most appropriate diagnostic category for excessive or pathological sexual behaviour (Goodman, 2001; Carnes, 2008; Kafka, 2010), but most researchers view it as an addiction and they argue that the criteria for substance dependence (DSM-IV-T-R, APA, 2000) are also applicable to problematic sexual behaviour (Carnes et al., 2010; Garcia & Thibaut, 2010; Goodman, 2001; Grant et al., 2010; Opitz et al, 2009) and Goodman (2001) has devised criteria for sex addiction based upon these symptoms. As with gambling disorders, these include tolerance, withdrawal, efforts to stop, loss of time and negative consequences (Goodman, 2001; Kafka, 2010). Sussman et al.



(2011, p. 31) estimate that sex addiction co-occurs commonly with love (50%) and chemical addictions (40%). Carnes (2001) developed a six stage model that describes the course of sexual addiction which progresses from initiation to the chronic phase. An important issue regarding out of control sexual behaviour is that it is highly stigmatised, usually to a greater degree than other addictions (Herring, 2011).

#### **a. Categories of Sex Addiction**

Different categories of sex addiction exist (Kafka, 2010; Sadock et al., 2007). The literature makes a major distinction between paraphilic and non-paraphilic behaviours. Paraphilic sexual behaviours are known commonly as ‘perversions’ and refer to “sexual stimuli or acts that are deviant from normal sexual behaviors, but are necessary for some persons to experience arousal and orgasm” (Sadock et al., 2007, p. 705). The DSM-5 lists nine different categories of paraphilias, but it is stressed that this is not an exhaustive list. These are paedophilia, frotteurism, exhibitionism, voyeurism, sadism, masochism, fetishism and transvestic fetishism (APA, 2013, p. 685). The final category relates to other paraphilias not elsewhere specified, such as zoophilia. By contrast, non-paraphilic or normophilic sexual behaviour (Kafka, 2010) refers to behaviours that are excesses of sexual behaviours that fall within the custom, laws or tradition of the society within which the individual lives: the behaviours are *quantitatively* different from the norm, i.e. their behaviour is not regarded as a ‘perversion’ but occurs more often than that which is regarded as ‘normal’. Carnes has developed ten categories of sex addiction, each describing distinct patterns of sexual addiction (Carnes, 1991; Carnes, Delmonico & Griffin, 2007). These categories were developed from his ground breaking research with recovering sex addicts in which he

compared their responses to a non- sexually addicted control group. Carnes (1991) initially proposed eleven categories, but later refined them to ten (Carnes et al., 2007). The ten categories are conceptualised as “disorders of courtship” (Carnes et al., 2007, p. 75), and 12 stages in the courtship process are contrasted against the corresponding sexual pathologies (ibid) and incorporated both paraphilic and non-paraphilic sexual behaviours. Sadock et al. (2007) state that problematic sexual behaviour can be identified when it does not fulfill the main purposes of human sexuality, which is to enhance relationships and loving attachments between people. Problematic sexual behaviour, by its nature, includes acts of exploitation and degradation of self or others and represents a distortion of the normal process of courtship, in which one notices, attracts, interacts and makes a commitment to another person (Carnes et al., 2007).

The first category of sex addiction is fantasy sex. One manifestation of this is the ‘romance junkie’ who chats with many potential partners online without ever meeting them; intrigue and obsession characterise fantasy sex. Another pattern, that may or may not involve the internet, is the person spending inordinate amounts of time planning or fantasizing about sexual encounters which are generally not acted out. This category is the one where the person is most likely to masturbate to the point of injury. The second category is voyeurism which includes compulsive viewing of pornography, both on or off line (Carnes et al, 2007). The voyeur remains uninvolved with his/her subjects. The literature generally concurs that compulsive viewing of pornography creates problems for both the user (Bensimon, 2007; Carnes et al., 2007) and his/her partner (Cavaglione & Rashty, 2010). Pornography displays distorted views of human sexuality and blurs the boundaries between reality and fantasy and

often gives the user a distorted sense of power (Bensimon, 2007). When pornography involves spying on people, voyeurism becomes combined with intrusive sex, another pattern, as it combines the elements of watching others for sexual gratification with taking liberties. In this case, the person is a victim of the voyeur. The third pattern is exhibitionism which can take many forms, ranging from dressing in very revealing clothing to exposing one's genitals in public places or via the internet. The goal is sexual arousal through exposing oneself in a way that is not socially sanctioned.

The fourth pattern is known as "seductive role sex" (Carnes, 1991, p. 46). In this pattern, the person habitually seduces others with the intention of gaining power or achieving a conquest. This pattern is characterised by numerous affairs outside of a primary relationship, or a series of relationships that subside once the target has been seduced. The fifth pattern is trading sex which has its most extreme expression in prostitution or trading sex for other favours such as drugs. Research in South Africa reveals that many women experience unequal relationships with men and trade sex for money, drugs or other commodities (Wechsberg et al., 2009). This pattern can also involve making pornography (which incorporates exhibitionism) and selling images via the internet. There is a dearth of literature on the long term effects of prostitution on any of the biopsychosocial dimensions and most of the literature searched via EBSCO focused upon the transmission of sexually transmitted infections or the legal problems encountered by prostitutes, rather than its' impact upon the person's capacity to enjoy intimate relationships. Carnes (2008) states that too much research focuses upon the economic drivers of prostitution and overlooks the fact that many prostitutes become involved in this work as a reaction to childhood trauma, often childhood sexual abuse.

Prostitution enables survivors of child sexual abuse to utilise the coping mechanisms of trauma arousal and repetition as a way of dealing with their abuse (Egan, 2003).

The sixth pattern relates to paying for sex, such as utilising the services of prostitutes, purchasing pornography or services at strip clubs. Egan (2003) reports that men who regularly visit strip clubs develop fantasy based relationships with the strippers and will often spend large sums of money on the women, for example, buying them cars, paying for cosmetic surgery or paying for health care. These gifts are given in exchange for sexual favours. The seventh category is intrusive sex in which the person takes liberties with others for their own sexual gratification. It encompasses a wide range of behaviours from making sexually explicit gestures or conversation when inappropriate, to deliberately touching people in a sexual way in a crowd (frotteurism). This behaviour is covert and the victim often feels uncomfortable, but is not always able to explain why they feel this discomfort.

Anonymous sex refers to cruising and picking up partners for casual sex and/or group sex. The internet has facilitated this category and it is common for people to go online to find sex partners: anonymity is one of the attractions of the internet (Levine, 2010). Pain exchange sex is the ninth category and involves the range of sado-masochistic activities. The defining feature of this category is receiving or causing physical pain to intensify sexual pleasure. The last category is exploitive sex and refers to sexual activity in which a clear boundary is crossed. Behaviours range from sexual harassment of others to being sexual with children, incest and rape of both children and adults (Carnes, 2008).

The internet has dramatically altered our lives on many levels and this includes the manner in which we express our sexuality (Grubbs, Sessoms, Wheeler, & Volk, 2010). The literature notes that the internet offers many advantages over the conventional ways of accessing pornography or potential sexual partners because it is far cheaper, it is anonymous and, compared to visiting ‘adult bookstores’ or singles bars, is far more accessible as patrons are able to operate from their home or office with little risk of being seen (Carnes et al., 2007). In addition, it is easier to access ‘hard core’ images with less risk of moral judgment (Albright, 2008; Chaney & Blalock, 2006). The internet can create sex addiction in individuals who previously did not have problems with sex due to those above factors (Carnes et al., 2007). Carnes (2003, p. 311) notes that the internet allows people to explore a greater amount and variety of sexual experiences and that “users are experiencing high degrees of arousal that are difficult to stop and of which they have no history”. Not only does the internet offer easy access to new sexual experiences, it also offers the person a way of accessing unresolved sexual issues from childhood. Pornography websites offer an enormous variety of different images that can capture the vulnerable user’s imagination and “access the unresolved” (Carnes, 2003, p. 312). In summary, the internet can accelerate all of the categories of sex addiction. Albright (2008) notes a dramatic increase in the number of women accessing internet for sexual purposes, mostly chat sites.

### **3.5.3 Other Process Addictions**

The literature lists other process addictions. An extensive literature review conducted by Sussman et al. (2011) lists eight process addictions and estimates the general prevalence of these addictions in the general population in the US. Gambling and sex have already been

discussed. The remaining five process addictions are firstly, eating disorders, most commonly over-eating or binge eating (Fortuna, 2012; Joranby, Pineda, & Gold, 2005; Schmitz, 2005). Sussman et al. (2011) estimate a prevalence of 2% based on the international research that they reviewed. Exercise (Allegre, Souville, Therme, & Griffiths, 2006) is estimated at 3% in the general population with a 25% co-occurrence with gambling, work, sex and shopping addictions (Sussman et al., 2011). Work addiction (Piotrowski & Vodanovich, 2008; Shifron & Reysen, 2011) is estimated at 10% in the general population (Sussman et al., 2011); compulsive spending/buying (Lejoyeux & Weinstein, 2010) at 6% in the general population. Internet addiction was first described in 1998 by Young who listed eight symptoms of this disorder, based upon the criteria for pathological gambling (Gilbert, Murphy & McNally, 2011) and is estimated to affect 2% of the general population (Sussman et al., 2011). Internet gaming disorder has been listed by the APA as a disorder that warrants further investigation for inclusion into later editions of the DSM (APA, 2013). All of these activities are viewed as being able to modify a person's mood and neurochemistry in a powerful way. Criteria for diagnosing these process addictions are based upon the symptoms for substance dependence as listed in DSM-IV-T-R. Strong arguments are made in the literature for the inclusion of these behaviours into an over-arching category of addictions or syndrome of addictions (Blum et al., 2012; Frascella et al., 2010; Shaffer et al., 2004). The inclusion of gambling disorders has opened the door to inclusion of other behavioural addictions in the future (Hodgins et al., 2011).

### **3.6 RELATIONSHIP ADDICTIONS**

“It is love’s unequalled capacity to profoundly influence each of the three pleasure planes – arousal, satiation and fantasy- that qualifies it as the ‘piece de resistance’ among the addictions” (Milkman and Sunderwirth, 1987, p. 45). Attachment theory has been used to describe and understand addiction and it is the view of some writers that a disturbance in the ability to form healthy and secure attachments is the basis of all addictions (Flores, 2004). Carnes (2008) lists four different forms of relationship addiction.

#### **3.6.1 Codependency**

This is the most commonly experienced form of relationship addiction (Flores, 2004; Beattie, 1989). It is linked to “enabling” and “compulsive caretaking” (Flores, 2004) which describes specific behavioural patterns, in contrast to codependency, which describes the pathological relationship (Doweiko, 2006). Codependency is characterised by an “indiscriminate hunger for appreciation or affection” (Flores, 2004, p. 61) and poor boundaries resulting in the codependent person being exploited and choosing to focus upon others, rather than on themselves. Bulwer (2006) argues that it is an addiction that is often overlooked but it plays a vital role in maintaining addiction within the family system. Codependents typically focus on and obsess about another’s addiction, cover up and protect the addict at the expense of their own health and well-being. In effect, they become addicted to the addict’s addiction. There are some critics of the concept of codependency who argue that it has not been validated by research and can be used too readily and indiscriminately by treatment professionals (Doweiko, 2006; Miller, Forcehimes & Zweben, 2011).

### **3.6.2 Trauma Bonding**

Trauma bonds are relationships that are characterised by exploitation, shaming, betrayal and danger and trauma bonded people have a pattern of becoming involved with untrustworthy or exploitative people, for example, a person who has a series of abusive and violent relationships with different partners over time (Carnes, 1997). Trauma bonded people have a high probability of having other addictions, such as substances or sex and are also at risk for being codependent upon others. The difference between codependency and trauma bonding is that the former focuses on the addiction, whereas the latter focuses upon an abuser (who has a high probability of having an addiction as well). Fear and previous exposure to trauma increases the likelihood of becoming involved in this type of destructive relationship. Examples of trauma bonds include relationships within cults, with abusers who do not acknowledge responsibility, or exploitative work relationships and domestic violence.

### **3.6.3 Co-sex addiction**

Carnes (2001, p. 127) describes the pathological relationship “dance” that occurs between a sex addict and his/her partner which he has called co-sex addiction. It is characterised by preoccupation and efforts to control the partner’s behaviour through a variety of ways, such as giving or refusing sex, having affairs to punish the sex addict for his or her behaviour and behaving in a compulsively seductive way.

### **3.6.4 Compulsive romantic attachment**

This is also referred to as “love addiction” (Sussman, 2010) and has features similar to substance dependence. It is defined as “a constricted pattern of repetitive behaviour directed



towards a love object that leads to negative role, social or safety or legal consequences” (Sussman, 2010, p. 41). He argues further that love addiction is different from genuine relationships in that they are fantasy based, involve destructive power struggles and are not truly intimate and fulfilling. These relationships are commonly short-lived and end once the emotional high of the initial attraction dwindles. Sussman (2010) observes that although the concept of love addiction still needs further empirical research, there is already some evidence that it is prevalent amongst individuals who have an anxious-avoidant attachment style and that it commonly begins in adolescence, as do most addictions. Prevalence of this addiction is estimated at 3% of the US population (Sussman et al., 2011).

### **3.7 CORE FEELING STATE ADDICTIONS**

This category refers to experiencing intense feelings as part of the addiction cycle. These feelings serve as triggers for or reinforcement of the other categories of addictions. These feelings are rage, shame, misery, intensity or risk, despair and self-loathing. The roles that these feelings play can be identified using a “neural pathway interview” (Carnes et al., 2005, p. 112) in which the counsellor explores in a detailed way how the different addictive activities were used in combination to produce all or some of the four rewards discussed earlier. Shame can ignite the desire to forget the problem, and the addiction is the fastest and most reliable way to do this. The despair felt after the addictive acting out fuels the shame and can result either in further addictive acting out or efforts to control or stop the behaviour which fail. The role of feelings as triggers or reinforcement becomes clear from this interview process.

### 3.8 ADDICTION INTERACTION DISORDER

Carnes et al. (2005) describe ten specific patterns of addiction interaction that have been identified through years of clinical experience with sex addicts, as was described earlier in the chapter. In that study, ten different patterns of AID emerged from the participants' experiences (n= 650) and the usefulness of these concepts were tested in a clinical setting. This is the only study that investigated the prevalence of these different patterns. It is interesting to note that many authors and researchers identified the existence of multiple addictions from the late 1970s (Carnes, 2008) and several identified trends of concurrence of addictions (Susman et al., 2011; MacLaren & Best, 2010). Carnes et al. (2005) were the authors who built on this information to understand the metapatterns that emerged from this concurrence to create a more powerful illness. In that research, fusion was the most commonly recognised pattern (61.5%), and alternating addictive cycles the least recognised pattern, at 41.5%. A small percentage of participants either felt that none of the patterns applied to them (6.5%) whilst 4.4% identified with all ten patterns. Flores (2004, p. 8) identified eight patterns of addiction interaction, which overlap the patterns described by Carnes et al. (2005). The patterns of AID are as follows:

- **Cross tolerance** can refer to two phenomena: firstly, the simultaneous increase in two or more addictions. The second is when an addiction 'switches' from one to another with no developmental sequence required for the new substance or behaviour, e.g. between alcohol and benzodiazepines, or switching from compulsive sexual acting out to cocaine use at larger doses than would be tolerated by a cocaine naïve person (Flores, 2004). Carnes et al. (2005, p. 89) use the analogy of a person switching a

degree course at university and transferring most of his or her credits over to the new course of study. Sadock et al. (2007, p. 384) define cross tolerance as “the ability of one drug to be substituted for another, each usually producing the same physiologic and psychological effect (e.g. diazepam and barbiturates) also known as cross-dependence.” This definition focuses solely on substance dependence, and not any other addiction. In the abovementioned research into AID, 61% of the 650 participants acknowledged cross tolerance as an issue.

- **Withdrawal mediation** involves reducing or avoiding the discomfort of withdrawal from one addiction through the use of another. This is frequently observed at rehabilitation centres when clients report an increase in their intake of cigarettes, caffeinated drinks and sugary food, all of which help to soothe them. Another factor frequently observed is the development of intense romantic attachments between clients, despite many having a partner and the strict rules in the centres prohibiting such relationships. They are unconsciously using the mood altering chemistry of falling in love to mediate their withdrawal from their other addictions. This pattern can either be episodic, as per the examples above, or as part of an addiction cycle. An example of this is using a ‘downer’ such as heroin to lessen the discomfort when the effects of crack cocaine end. In the same study reported by Carnes et al. (2005), 56% of the participants reported this pattern.
- **Replacement** is described by Nakken (1996 p. 17) who notes that “a person can switch an addictive relationship from object to object and event to event... [this] helps

create the illusion that the ‘problem has been taken care of’ when in reality one addictive relationship has replaced another. This buys more time for the addict”. Similar behavioural and emotional features remain with the new addiction. The difference between this pattern and the first two is that there is usually a time lapse of six months to a year. In effect, the addict finds “new, destructive ways to replace [their] old strategies to combat stress” (Carnes et al., 2005 p. 92) and 43% of their participants reported this as an issue.

- **Alternating addiction cycles** can include binge/purge/deprivation cycles. It is important to get a thorough history from the addict, so as to track patterns that exist over time. A person can alternate between being sexually anorexic and compulsively eating during which time they gain up to 70 kilograms in weight, and then losing the weight when switching to sexual acting out and having an aversion towards food. The acting out and aversion cycles share important features: they are used to assist the person mood alter and deal with stress, and need to be seen as part of the whole cycle of the illness. This pattern was experienced by 41% of participants (Carnes et al., 2005).
- **Masking** is characterized by the addict using one addiction to hide or excuse another, perhaps more serious addiction that carries greater social sanction. An example of this is the sex addict who readily admits to being an alcoholic and who will blame a lot of his or her behaviour on the effects of the alcohol. Carnes et al. (2005) stated that 45% of addicts reported this pattern as being applicable to themselves.

- **Ritualising** occurs when the rituals for one addictive behaviour are the same or similar to another, such as buying cocaine from a brothel (Carnes et al., 2005 p. 95). Addictive rituals isolate the person from others and can lead to dangerous, self-harming behaviours, causing shame and they are often used to induce or enhance a trance-like state. With internet addiction, for example, the ritual of switching on the computer, drawing the curtains and preparing the room produces a trance-like state of anticipation (Carnes et al., 2001). Schneider et al. (2005) argue that rituals are used to keep the addictive experience predictable. This was identified as a pattern by 41% of addicts in the research discussed by Carnes et al. (2005).
- **Intensification** usually begins when an addict binges on several addictions simultaneously e.g. gambling and taking cocaine and then discovers that each activity enhances the potency of the others. When these behaviours are combined more regularly, they begin to fuse. Fusion levels can vary from full fusion, to partial and binge fusion. With full fusion, the addictive behaviours will only occur together. With partial or binge fusion, these behaviours can still be performed separately, but when combined, they produce a better 'high'. This pattern was reported by 61% of respondents (Carnes et al., 2005).
- **Numbing** occurs when one addiction is used to medicate pain or shame that has been caused by other addiction. Where this pattern is evident, there is a high probability that the person is a trauma survivor (Carnes, 2008) and the addiction is used to soothe or assist with affect regulation (Kinniburgh et al., 2005). An example of numbing is a

person using a ‘downer’ drug after a period of high stress. This was reported by 54% of participants (Carnes et al., 2005).

- **Disinhibiting** occurs when one addiction is used to lower inhibitions for other addictive acting out. A common example is a person who only has sex with prostitutes after bingeing on alcohol. When sober, this person may present with sexual aversion and would not be able to go to a prostitute unless under the influence of alcohol. This was reported by 42% of the participants (Carnes et al., 2005).
- **Combining** involves mixing addictive experiences to create a unique high or to sustain the high. An example is speedballing (this is a practice of mixing cocaine and heroin or morphine together in an intravenous injection). The different drugs or behaviours are combined in specific ways as “different agents at complementing steps in the dopamine cascade” and 42% of addicts reported this as an issue in the study cited (Carnes et al., 2005, p. 100).

Carnes et al. (2005) argue that effective treatment necessitates an awareness of addiction interaction. A failure to look for patterns and educate the addict could lead to an inadequate assessment of the full extent of the addictive illness and contribute towards a poor response to treatment. This study utilised the information discussed in evaluating the participants’ multiple addictions and assessed which of the ten patterns of AID were experienced by them.

### **3.9 TREATMENT OF ADDICTION AND RELAPSE RATES**

The research question that this study sought to address was if treatment programmes in Durban, South Africa, currently assess and treat MA and AID. This section will review relevant literature on in-patient programmes for addiction that are offered in South Africa, evaluation thereof by the service providers and relapse rates following treatment exposure.

#### **3.9.1 Treatment**

A review of the treatment programmes of several of the rehabilitation centres in KZN, and the rest of South Africa reveals that most of them subscribe to a similar treatment format in the treatment of substance dependence, for example, SANCA rehabilitation facilities ([www.SANCA.co.za](http://www.SANCA.co.za)), Houghton House ([www.houghtonhouse.co.za](http://www.houghtonhouse.co.za)), and Stepping Stones ([www.steppingstones.co.za](http://www.steppingstones.co.za)). This process involves the person being admitted and assessed by the multidisciplinary team. The admission is usually voluntary; only a few designated rehabilitation centres are registered to admit people committed via the court. Treatment generally consists of a few days of detoxification (the time period can vary), either at the facility or in a hospital. Thereafter the person, usually referred to as a patient, attends the therapeutic programme which consists of several modalities. This includes attending groups which focus on different aspects of addiction and life skills. The patient also has some individual counselling and family counselling, if appropriate. Most centres have a multidisciplinary team consisting of social workers, psychologists, nursing staff, medical doctors, psychiatrists and occupational therapists. Most centres work on the AA abstinence philosophy, originated by the Minnesota model of addiction treatment (Miller et al., 2011), and many utilise the 12 Step programme advocated by the AA (Alcoholics Anonymous,

2001). Some centres utilise lay counsellors who are recovering addicts and most centres host Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) meetings.

The literature observes that certain groups encounter more barriers to accessing treatment and, in relation to South Africa these are women, teenagers and Black Africans (Pelzer, Ramlagan, Johnson & Phaswana-Mafuya, 2010). Women face more barriers to receiving treatment than men (Jack et al., 2011). This is due to the greater stigma attached to women with addiction, resulting in greater shame and guilt and denial than men which makes them more reluctant to access treatment (Hecksher & Hesse, 2009). Further, incidences of substance use disorders in women are increasing both internationally and locally (Jack et al., 2011; Wechsberg et al., 2009) and, as was established earlier, women are more at risk for having a history of exposure to trauma prior to the development of addiction, which can compromise their response to treatment (Becker et al., 2012). Further, women are at greater risk of developing physical problems from substance use and they can also expose their unborn children to complications if they use substances during their pregnancies (Wechsberg et al., 2009).

Teenagers, as a group, are also less inclined to seek treatment and are more likely to binge on substances, as was discussed in Chapter 2. There has been an increase in the proportion of teenagers accessing treatment in South Africa (Pelzer et al., 2010) although this trend seems to have stabilised (Dada et al., 2012). All of the local literature notes that Black Africans are underrepresented in treatment (Department of Social Development, 2012; Parry et al., 2009). The major barrier to treatment uptake amongst Black Africans seems to be the location of



many treatment centres in traditionally White areas (Bowles et al., 2011) although Dada et al. (2012) note an encouraging trend that more young (under 20) Black Africans are accessing treatment.

Historically, prior to 1994, the treatment of substance abuse in South Africa was “fragmented and limited in scope, coverage and impact” (Bowles et al., 2011, p. 309). The focus was upon the treatment of alcoholism in ‘white’ areas. Few minimum standards were laid down for treatment facilities and no culture existed regarding the use of evidence-based practice or the introduction of newer knowledge and technologies to enhance treatment (Bowles et al., 2011; Pelzer et al., 2010). Since 1994 there has been an effort to make treatment more widely available to all the people in South Africa, to develop more holistic policies to address substance abuse, such as the South African National Drug Plan 2006-2011 and 2012-2016 (Department of Social Development, 2006, 2012) and to monitor drug use trends through SACENDU. Whilst these efforts have been lauded, it has been noted that important gaps still exist in the monitoring of drug use trends (Peltzer et al., 2010) who recommend that a central agency be created to monitor drug use and treatment in South Africa. There has been an increased focus on the prevention of drug abuse, as well as treatment (Department of Social Development, 2012).

At the same time, factors have arisen which complicate the treatment of addiction. In South Africa, as well as internationally, the profile of patients requiring treatment has changed. People are presenting at a younger age for treatment and more have histories of poly-substance abuse (Parry et al., 2009). There has also been a marked increase in the range and

availability of drugs in South Africa (Bowles et al., 2011; Parry et al., 2009). The availability of legal gambling has proliferated (Bulwer, 2006) and the internet has changed the way we communicate with others (Carnes et al., 2007). These factors increase the challenges inherent in the treatment of addiction.

Despite these new challenges Bowles et al., (2011) note with concern that few drug rehabilitation centres monitor and evaluate their programmes or treatment outcomes, which makes effective planning very challenging. Their research evaluated the overall functioning of drug rehabilitation centres and the management of 44 centres throughout South Africa (out of 89 that were approached) that agreed to participate in their research. The study assessed the centres in four specific areas: facility resources, staff skills, organisational climate and information systems available for clinical and programme management. This was based on the Texas Christian University model (TCU) which evaluates the functioning of rehabilitation centres. A key finding was the lack of urgency by staff and management at the centres to change and adapt their programmes. However, management and staff did express an openness to change and rated staff cohesion, autonomy and communication positively.

### **3.9.2 Relapse Rates**

No systematic data on relapse after treatment in South Africa was available, due to lack of formal evaluation (Bowles et al., 2011). International data reveals a range of relapse rates. The research measures the relapse rates within the first year after completing treatment and demonstrates poor treatment outcomes for substance dependence. Relapse rates are reported to be 80% (Shaffer et al., 2004) for drug addiction in general, and 40-70% for alcohol

dependence and 97% for opioid dependence within the first year of completing treatment from research conducted in the US (Kampman, 2009). A nine year longitudinal study investigated the effects of treatment on over 1 300 people diagnosed as addicted to substances and the findings showed that exposure to more treatment episodes early on the in drug-using career is beneficial. However, exposure to treatment later on in life had fewer benefits (Scott, Dennis, Laudet, Funk, & Simeone, 2011). These authors believe that addiction should be seen as a chronic, relapsing illness, such as cancer in which “early treatment and re-intervention (when necessary) are generally associated with a reduced risk of mortality” (p. 742).

Research into factors associated with a positive response to treatment by mental health care users include being over the age of 30, employed, motivated for treatment and having an awareness of the negative consequences of relapse. Other important factors are having good social support and being able to find a new circle of substance abstinent friends (Alemi, Stephens, Llorens & Orris, 1995).

A review of recent research focusing on improving the assessment and treatment of addictions makes no mention of multiple addictions: the focus is exclusively upon substances (Krippner & Dunbar, 2011). Carnes (2008) argues that the failure to assess and treat the full spectrum of addiction is one reason for poor treatment outcomes.

### **3.10 CHAPTER SUMMARY**

This chapter reviewed the literature that is directly related to the research question, aims and objectives. It critically discussed the spectrum of addictions utilising the four categories of addiction, as proposed by Carnes (2008), paying particular attention to substances, sex and gambling which were the initial focus of the research and are acknowledged as being amongst the most prevalent and well researched addictions (Frascella et al., 2010). The development of the concept of AID was discussed and the ten patterns were described in some detail. Finally, issues relating to treatment programmes, outcomes and relapse rate were discussed. The following chapter describes the research methodology employed to answer the research questions.

## **CHAPTER 4**

### **METHODOLOGY**

#### **4.1 INTRODUCTION**

This chapter describes the research methods and design used in the study. Durrheim (2006, p. 33) lists four dimensions of research design which are context, purpose, paradigm and the techniques. These dimensions need to be coherent to ensure that the data collected can answer the research questions in a way that is clear and useful. The context and purpose of my study were described in Chapter 1. In this chapter, the research paradigm and reasons for its selection are discussed and then the design is described. This description covers the selection of the sites, the timeframe within which the research took place, the sampling methods employed and the means by which the data were collected and analysed. The chapter concludes with considerations of issues relating to the validity and reliability of findings from the research process: Creswell (2009) recommends the use of these terms in mixed methods research to denote the concepts for data from both the quantitative and qualitative approaches. Ethical issues concerning this study are then examined and the chapter concludes with a summary to highlight the key points of the research process.

#### **4.2 THE RESEARCH METHODOLOGY**

This research is based on the mixed methods approach, which is also referred to as “the third paradigm” (Dures, Rumsay, & Morris, 2011). Mixed methods research involves combining research design methods from within or between research paradigms in a pragmatic way to

ensure flexibility and sensitivity in addressing a research problem. Mixed methods research is gaining increasing popularity in the health sciences due to these factors (Creswell & Zhang, 2009; DeVos, 2005; Fielding, 2010; Palinkas et al., 2011). Historically, this method began when Campbell and Fiske elaborated the concept of “triangulation” in 1959 (Fielding, 2010). Other authors locate the origins of mixed methods slightly later, stating that mixed methods began to be used in a variety of fields, ranging from education, sociology and management in the late 1980s, and that the term “mixed methods” became standardized in 2003 in an important publication by Tashakkori and Teddlie who edited a book on mixed methods in the social and behavioural sciences (Creswell & Zhang, 2009; Ngulube, Mokwatlo, & Ndwandwe, 2009). Ngulube et al. (2009) note that mixed methods gained legitimacy once the great “paradigm wars” (p. 105) that were waged from the 1970s to the 1990s were resolved between the qualitative and quantitative approaches. This third paradigm emerged and has gained acceptance amongst researchers and it is being utilised in many different disciplines.

In the social work profession, Sherman and Reid edited a book in 1994 which examined the relationship between the two research approaches on epistemological and methodological levels. They stated that all of the contributors to their book “overwhelmingly endorse the principle of methodological integration” (1994, p. 14) with Harrison calling the integration of the methods in social work research “inevitable” (1994, p. 409). Seventeen years later, Dures et al. (2011) concur with Harrison and recommend that the two paradigms should be seen as complementing each other, with each able to enhance the research outcome and that neither approach should be seen as inherently superior to the other.

The strength of the quantitative paradigm is that it asks questions such as “how many?” and “how strong?” regarding the association between the data. The qualitative approach asks “what and how?” questions (Dures et al., 2011, p. 333). Together, the research problem is addressed in a more in-depth manner. The literature notes that there are different understandings of the term “mixed methods” ranging from an exclusive focus upon the methodology to a broader acceptance of pragmatism as a research epistemology (Creswell and Zhang, 2009; Fielding, 2010; Palinkas et al., 2011). Creswell and Zhang (2009, p. 613) highlight four essential features that need to be present for the research to meet the criteria of mixed methods.

The first characteristic is that data are collected and analysed using both quantitative and qualitative methods. Secondly, all procedures relating to the research process, from sampling through to data analysis, must be rigorous and have methodological integrity. The third feature is that the research design is mixed and this can occur in one of three ways: merging, connecting and embedding (Creswell & Zhang, 2009; Palinkas et al., 2011). Finally, mixed methods research implements two databases, both qualitative and quantitative, which are utilised in different ways to answer the research questions. The precise emphasis and sequence of this implementation depends on the research design.

Philosophically, this third paradigm is based on pragmatism. Pragmatism is described by Hookway (2010) as a philosophical movement originating in the United States in the 1870s with William James and John Dewey cited as important founders of this philosophical approach which seeks to evaluate the success of ideas by their practical consequences or

application. In effect, ideas are evaluated for their usefulness, rather than loyalty to any specific paradigm. Hookway (2010) asserts that pragmatism has recently enjoyed a revival in popularity.

In the context of research, pragmatism is helpful as it allows for flexibility in selecting the most appropriate methods to answer the research questions and frees the researcher from the limitations that could exist if adhering to one specific paradigm. Dures et al. (2011, p. 339) argue that the mixed methods approach is very useful in the study of health issues as it allows the researcher the freedom to respond to the ethical and practical issues inherent in working with participants with health problems. The focus shifts to what is the best way of answering the research question, which is often sensitive in nature, rather than being restricted to and by, a particular paradigm. This research paradigm is also, in my opinion, compatible with the biopsychosocial model as it offers the flexibility, breadth and depth to address the complex and sensitive issue of addiction.

Carnes (2008) contends that addiction needs to be seen as a trauma-based illness and that people with addiction problems report higher incidences of traumatic exposure, both prior to and after the onset of addiction (Cloitre et al., 2009; S. Johnson et al., 2010), as was discussed in Chapter 2. Creswell and Zhang (2009, p. 613) suggest that mixed methods research is well suited to researching trauma. They state that trauma was traditionally researched from the quantitative tradition but since 2007 there have been an increase in the number of published articles utilizing mixed methods designs. Babbie and Mouton (2001, p. 309) propose that qualitative research is best suited to studying the “subtle nuances of attitudes and behaviours



and for examining social processes over time” and it can enhance the understanding of data obtained quantitatively. Creswell and Zhang (2009) describe 12 different possible design typologies applicable to mixed methods research designs and suggest that four of these are suited to trauma research.

The research design used in this study is the concurrent design, specifically the “concurrent embedded strategy” (Creswell, 2009, p. 214). This is characterised by the simultaneous collection of qualitative and quantitative data with one method (in my case, the qualitative method) being primary, with the quantitative data providing a secondary, supporting role in the research design. The secondary method is “embedded or nested” (p. 214) within the primary design and allows for a different perspective to be gained in the research endeavour. The data are collected within the same time frame, in a single phase and are analysed separately in a manner appropriate to the data. The results are combined in the analysis and/or the interpretation. The data are compared to look for convergence or divergence. The intention of this design is to utilise the two different types of evidence collected: quantitative data with the qualitative data to enhance understanding of the research problem. The results are presented either side by side or jointly. In relation to this study, the survey phase provided the platform that enabled me to explore MA, AID and treatment in a quantitative manner and to cross check the data from each method. Although it played a supporting role, the survey was a vital step, enabling me to determine rates of MA and to select participants with MA for the in-depth interviews.

Creswell and Zhang (2009) state that concurrent designs possess both strengths and weaknesses and these issues need to be understood by the researcher when devising the research design. I was mindful of these factors when planning the research with my supervisors. The two potential weaknesses are, firstly, the data could provide contradictory information and, secondly, that this design requires extensive data collection. The issue of potentially discordant findings was not seen as a problem but as having the potential to yield important information on this complex and sensitive issue. My supervisors assisted me in managing the data collection process to ensure the integrity of the research project through regular meetings during which I informed them of the progress of the three phases of the research. The strength of this design is that it makes sense intuitively by providing “multiple ‘angles’ on a problem” and it offers an economical way to collect data (Creswell and Zhang, 2009, p. 615).

Harrison (1994, p. 411) states that the social work profession is well placed to incorporate mixed methods due to two important characteristics of the profession: relativism and reflexivity. Relativism is the desire and ability of social workers to understand the world view of others, and to see the world from more than one viewpoint. Harrison (1994) argues that relativism is essential to ensure that practice is both effective and ethical. Reflexivity in social work derives from the practice of empathy and awareness of the self and the impact of the self upon the client system as well as the reciprocal impact of the client system upon the practitioner. In the context of research, reflexivity enhances the practitioner’s awareness of his or her impact on the research process and is an important factor to enhance the validity or credibility of research findings undertaken from the qualitative paradigm (Sathiparsad, 2006)

### **4.3 THE RESEARCH DESIGN**

The theory that guided the study was the biopsychosocial model, which was developed from General Systems' Theory (Engel, 1977) and it was deemed to be valuable in guiding this research which was exploratory in nature. This was the first study in South Africa that investigated the incidence of MA and AID amongst people with substance use disorders. Addiction is a complex illness which impacts upon many levels, and the biopsychosocial model was vital in keeping me mindful of this fact.

As stated previously, the research design utilised in this study was a mixed methods, concurrent embedded strategy (Creswell, 2009). The research questions, aims and objectives were best attained and answered through a mixed methods design, which offered the flexibility to answer the complex issue of addiction. The quantitative aspect of the design investigated the drug use patterns, the prevalence of sex and gambling addictions and the treatment history amongst a group of participants admitted for treatment of chemical dependency. These are the “how many” and “how strong?” questions (Dures et al., 2011, p. 333) that needed to be asked regarding MA and AID. These questions were answered through administering questions to the participants (who had been admitted as in-patients for treatment) via a survey. This phase was the first step in selecting in-patient participants for the in-depth interviews.

The information obtained from the survey provided the context within which to understand the qualitative aspect of the research, which explored how professionals treating addiction understood and treated MA and AID and asked the “what and how?” questions (Dures et al.,

2011, p. 333). The qualitative methods were used to explore how the participants had experienced their different addictions and if these separate addictions combined in patterns as postulated by Carnes et al. (2005). Specifically, those questions were explored through the use of group discussions with the professionals, and through the use of in-depth semi-structured interviews with a selection of participants demonstrating MA. The research process that was developed and utilised will now be discussed.

#### **4.3.1 The Research Process**

The research process was divided into three phases, which were implemented in the same time frame (a six week time period), in keeping with the concurrent embedded strategy (Creswell, 2009). Each phase had a specific role to play in meeting the objectives of the study. The first phase consisted of group discussions with the professional staff at the rehabilitation centres and was designed to meet objectives five and six. These discussions were conducted first as a way of introducing the study to the professional staff employed at the three centres. This was important as they needed to be aware of the research and could potentially have their clients who had participated being referred to them for follow up should the need arise, such as the disclosure of trauma and a need for counselling to address this. The second phase, consisting of a survey of in-patients, was designed to meet objectives one and four: understanding the profile of in-patients and establish if they had multiple addictions and to establish previous exposure to treatment. The third phase, in-depth interviews, was linked to objectives two, three and four. These objectives sought to investigate the development of addiction (particularly regarding family and trauma), to explore the

experiences of MA, AID as well as treatment. The link between the objectives and the research phases are demonstrated in Table 4.1.

**Table 4.1 Relationship between research objectives and phases of the research**

Objective Number	Objective	Phase
1	Profile of in-patients & establish prevalence of MA	Phase 2: SAQs & assessment for gambling and sex addictions
2	Role of family dynamics & trauma in development of addiction	Phase 3: in-depth interviews
3	Experiences of MA & AID	Phase 3: in-depth interviews
4	Previous treatment exposure & outcome	Phase 2: SAQs Phase 3: in-depth interviews
5	Current understanding & treatment by professionals	Phase 1: group discussions
6	Treatment recommendations	All 3 phases

Both the first and third phases utilised research methods derived from the qualitative paradigm. The second phase, which utilised quantitative methodology, was a survey to detect gambling and sex addictions amongst participants admitted during a six week period at the rehabilitation centres. The development and selection of the research instruments are described later, in Section 4.3.5. The third phase involved conducting in-depth interviews with a selection of survey participants, who had been assessed as having multiple addictions during the survey. These participants were selected via purposive sampling.

I conducted all of the research personally, for two reasons. Firstly, it helped ensure consistency in data collection within each phase, as well as between the three phases of the research process. More importantly, this was done as part of ethical research practice with the aim of preventing any of the participants finding the research process distressing. I was able to de-brief any participants and refer them to their counsellors for follow up intervention, if necessary. This point is discussed more fully in Section 4.5. I had the assistance of an isiZulu- speaking social worker with one group of participants and she translated some of the questions for two participants. Table 4.2 describes the steps followed in planning the research process to ensure that the resultant study would flow smoothly and obtain the most useful data to achieve the six research objectives.

The steps included, firstly, clarifying the research aims and questions, as set out in the research proposal which was approved by the University of KwaZulu Natal (UKZN) School of Humanities Higher Degrees Committee (HDC). Secondly, after familiarizing myself with the literature on MA and AID, I selected and drew up the research instruments (Appendices 3 to 7). This process is described in section 4.3.5. Thirdly, I carefully selected three drug treatment centres in which I planned to carry out my research and approached the management for permission to conduct the research (Appendix 2).

Table 4.2 Research plan

Phases	Purpose	Description of process	Outcome
<b>Writing up proposal</b>	Establish aims of research and questions to be asked	Compiling a document that reflected the purpose of the research through analysis of literature and awareness of research context	Proposal passed by Higher Degrees Committee  Ethical clearance obtained from Human and Social Sciences Ethical Committee, UKZN
<b>Selection of research sites</b>	Select sites with differing patient populations to obtain a good 'spread'  Obtain consent from management to conduct research	Interaction with different rehabilitation centres.  Obtaining cooperation from management of the institutions regarding research	Three sites selected which offered different programmes ensuring a good 'spread' of participants
<b>Compiling and selection of research instruments</b>	Effective instruments that answer the research questions	Compilation of questionnaires for all 3 phases based on literature and aims of the research  Careful selection of screening tests for sex and gambling from array available in the literature	Research instruments which can answer research questions.  Use of these instruments approved by Ethics' Committee.
<b>Conducting pilot study</b>	Testing research instruments to establish if participants are able to understand and are comfortable with them	Eight participants at one centre participated in pilot study	Some wording in survey questionnaire modified to facilitate understanding
<b>Meeting management before commencement of study</b>	Negotiate dates to conduct research	Scheduled meetings with management. Copies of all questionnaires given to management for their records	Full cooperation from management of the three centres to conduct the research

### **4.3.2 Selection of the Research Sites**

The three centres selected for this study are well established centres offering treatment or aftercare for drug dependence in the eThekweni district. Most of the rehabilitation facilities in the province of KwaZulu Natal (KZN) are situated in the eThekweni metropolitan area and they receive patients from both eThekweni and the whole of the province, as well as from other parts of South Africa.

One of the centres that participated in this study is the only state-run institution in the eThekweni region and accepts patients who apply for voluntary admission, as well as patients referred by the courts. Those referrals are either via the Criminal Procedures Act, 51 of 1977 (as amended) or via the Prevention of and Treatment for Drug Dependency Act, 20 of 2008. This centre offered a 12 week treatment programme and had a multidisciplinary team offering treatments ranging from medical and psychiatric assessment and care, the counselling of individuals, groups and families and occupational therapy. It accommodated approximately 70 patients. Patients were admitted in intake groups of up to 25 at a time and a new intake group is admitted every fortnight with male and female patients admitted in separate groups.

The second centre was a state subsidised treatment facility that offered a three week treatment programme with a multidisciplinary team offering assessment and therapy for addiction, including individual, group and family counselling. It accommodated approximately 30 patients and new patients were admitted weekly. It is registered to offer specialised treatment for gambling and some (not all of the staff) have received specialised training in the treatment



of Pathological Gambling (PG) which is now referred to as gambling disorders in the DSM-5 (APA, 2013).

The third centre was registered by the Department of Social Development to offer long term aftercare for substance use disorders and it accommodated 40 patients. Patients were admitted to this facility after receiving initial rehabilitation services at either a drug rehabilitation centre or a psychiatric facility. This centre offered a six week treatment programme with the option of remaining on a longer term basis to assist with re-integration into the community. This centre also offered individual and group counselling. The three centres together treated a wide spectrum of people requiring addiction treatment and their patients come from different geographical areas in South Africa.

These three institutions were selected to obtain a 'spread' of participants, ranging from those who had been committed via the courts for rehabilitation, to those who were receiving treatment voluntarily. In addition, by using different centres, there would be greater variety in participants' length of time in treatment, as each facility offered different treatment time frames. This factor has been listed in the literature as impacting on the quality of information that the participant is able to supply. Some authors have observed that people who have had a longer period of sobriety are able to reflect more openly on their addiction experiences (Carnes, 1991; Opitz et al., 2009). This factor was important and was borne in mind when conducting in-depth interviews with the participants.

### **4.3.3 Time Frame of the Research and Pilot Study**

Prior to beginning the research, in June 2011, I approached the management of the three institutions selected to request permission to conduct my research at their facility. They were shown the research instruments that I had developed and selected, as shown in Table 4.2. These were the draft survey form, the self-assessment screening tests, the outlines for the in-depth interviews with patients and a list of the discussion points for the staff. I also showed them the informed consent form and explanatory letter that would accompany the form (Appendix 2). The management of the institutions was invited to comment. Two institutions requested clarity on confidentiality for the participants. I explained to them how I would protect the identity of the participants. They were not required to write their name nor the centre's name on the survey forms. Each survey form was allocated a unique number with the participant's first name and surname initial being recorded in a separate book. Data storage is discussed in section 4.7. To protect the identity of the participants, which was part of the ethical considerations that guided the research process, when writing up the report I used pseudonyms and did not mention specific geographical locations nor the names of specific treatment facilities. These strategies satisfied the management and written consent was obtained from the head of each institution for me to conduct the research with their in-patients and staff. This written consent was attached to my research proposal which was submitted to the University of KwaZulu Natal Higher Degrees' Committee in August 2011.

After this process had been completed, I conducted a pilot survey with eight in-patients at one of the centres and thereafter made a few minor adjustments to the self-administered questionnaire to make the questions easier to understand. These changes did not alter the

substance of the questionnaire, but clarified the questions. The screening tests for gambling and sex addictions did not change. Prior to beginning the research in 2012, I met with the management teams at each institution to discuss the research process. They were shown the revised questionnaires and screening instruments that were to be used and they again approved their use with their staff and in-patients. The research took place over a six week period during the latter part of 2012. The decision to limit the fieldwork to a specific time frame was made for three reasons. Firstly, it was necessary as part of the concurrent research design where all data are collected in a single phase. Secondly, the timeframe was necessary to ensure that the sampling for phase one was executed in a manner to increase the reliability of the findings, as all in-patients at the centres would be asked to participate in the study. Thirdly, due to the high turnover of people at rehabilitation centres, confining the data collection to a specific period ensured that survey participants were accessible for follow-up interviews. One exception had to be made to this time frame, as one of the centres does not admit men and women in the same intake group. Therefore, to screen the female participants at that centre, I had to conduct the research with those women outside of the six week time period specified above.

Table 4.3 describes the three phases that were implemented in the research process. The discussion that follows will describe the methods of sampling, the research instruments used, how the data were collected and managed and, finally, analysed.

**Table 4.3 Mixed methods Research Design: Concurrent Embedded Strategy**

Method of Sampling	Method of data collection	Analysis
<b>Phase 1.</b> n=11, Qualitative tradition		
All staff at rehabilitation centre asked to participate in group discussion	Group discussion using guidelines. Notes taken during the sessions.	Answers and comments transcribed, analysed and coded into themes using theoretical thematic analysis
<b>Phase 2.</b> n=123, Quantitative tradition		
All in-patients admitted to rehabilitation centre were approached to participate in screening. Two proposed exceptions: severe mental illness and admission for an addiction other than substances	Self -Administered Questionnaire with 3 elements: 1 Biographical and drug history 2 Self -test for gambling 3 Self- test for sex addiction Perusal of participants' medical records	Data coded and programmed into Epidata. Data analysed using SPSS 19 statistical package
<b>Phase 3.</b> n=25, Qualitative tradition		
Purposive sampling of participants positive for sex and/or gambling. Participants selected on basis of "spread" of characteristics	In depth interviews which were audio-recorded. Interview schedule used as guide for discussion.	Interviews transcribed and analysed by use of thematic analysis. Data were coded into themes and trends via inductive and theoretical thematic analysis

#### 4.3.4 Sampling

The method of sampling used differed between the phases, due to the mixed- method research design used in this study. Neither method is superior or more effective than the other; the differences lie rather in the purpose of the research paradigm (Alston & Bowles, 2003). The quantitative paradigm requires the sampling method to be objective and representative to ensure valid results; each participant should have an equal probability of being selected for the study. By contrast, sampling is more flexible in the qualitative paradigm and is non-probable in nature, being driven by the purpose of the research to select participants who can offer useful insights into the research enquiry. Sampling serves to increase the scope and depth of the research that is undertaken (Babbie & Mouton, 2001; De

Vos, 2005). Sampling in the qualitative paradigm is criticised as it encompasses many different types of sampling methods which can cause confusion and “method slurring” resulting in research lacking the necessary rigour, a problem especially prevalent amongst inexperienced researchers (Coyne, 1997, p. 623). Notwithstanding these concerns, Creswell and Zhang (2009) state that concerns about sampling are overcome when the researcher adheres to the principles of rigour and good research design.

In the first phase of the research, I ran discussion groups with the professional staff at each treatment centre who were selected for participation via purposive sampling. The research problem dictated that the views of professionals treating addicts be explored. All professional service providers (for example social workers, psychologists, occupational therapists, nurses and doctors) were invited to participate in the study.

In the second phase, I approached all of the people who were admitted as in-patients for the treatment of a substance use disorder at the three centres described above during the time frames listed earlier. At two of the centres, I was permitted to talk to in-patients directly during their morning group sessions and explain the purpose of the research and invite them to participate. The third centre arranged that the manager approach their in-patients regarding my research. The diagnosis of substance use disorder had been made by the multi-disciplinary team at each of the participating institutions at the time of admission. Thus each person present had an opportunity to participate in the research, in keeping with the requirements of sampling in the quantitative tradition. Three potential exclusions were specified prior to beginning the research: those who refused to participate, as participation

was voluntary, in keeping with the research ethics guiding the process; those who had been evaluated by the staff as being too acutely psychiatrically ill to participate; and those who were not diagnosed with substance dependence (e.g. they have been admitted for a gambling addiction).

The third phase of the research utilised the qualitative paradigm. Based upon their responses from the quantitative study, certain participants were purposively selected to be interviewed in an in-depth manner as part of the third, qualitative, phase of the research design. Each of the 25 participants exhibited multiple addictions but they also presented with a variety of biographical characteristics. The sampling was utilised to obtain a range of participants to provide rich data to understand the research problem. All of the participants interviewed had participated in the survey phase of the research and, over the six week period in during which I conducted the research, the participants were interviewed within a week of completing the self-administered questionnaires. This was to ensure that they would still be at the centre and available to be interviewed.

The criteria listed below were utilised to select a range of participants who could yield useful information for the study (Babbie, & Mouton, 2001).

- Presence of a positive score for gambling and /or sex addiction
- Age
- Sex
- Sexual orientation
- Racial group

- Number and range of substances abused
- Length of years abusing substances
- Voluntary versus involuntary admission
- Previous exposure to treatment

Participation was voluntary for all phases of the research and all participants signed an informed consent form, as per the ethical guidelines that governed the research (Appendix 2.4). These signed consent forms have been stored in a file, as will be discussed in section 4.3.7.

#### **4.3.5 Development and Selection of the Research Instruments**

The research instruments were either carefully selected or developed to ensure that the data collected would assist in meeting the six objectives of this study. Each phase of the research process utilised at least one questionnaire, as will be described below.

##### ***a. Phase One: Guide for group discussion***

This instrument was used to meet the research objective of establishing how professional staff understood and assessed MA and AID and their current treatment programmes for addiction [Appendix 3]. The question schedule asked the staff to complete information regarding their age, professional qualifications and years of experience both in their profession and specifically in the field of addiction. The schedule of questions discussed was based upon the research objectives. The second page of the schedule was given to the

participants when we discussed questions four to seven which dealt specifically with AID, which was a new concept for the participants.

**b. *Phase Two: Self-Administered Questionnaires***

This questionnaire was used to gain an understanding of the profile of the participants and to establish the prevalence of sex and gambling addictions. It also was used to understand previous treatment exposure. Participants were given a self-administered questionnaire (SAQ) to complete [Appendix 4]. The SAQ had three parts. The first three pages [Appendix 4] were developed by me and asked for biographical information to obtain a general overview of the participants in the research. The literature and my previous clinical experience were used in deciding which biographical questions to ask in the self-administered questionnaire, (Alemi et al., 1995). Questions covered the participants' age, sex, employment, marital status, number of children and sexual orientation. These questions formed part of the admission assessment administered by staff at the rehabilitation centres that participated in this study and are utilised to help the multidisciplinary team in assessing the person entering treatment. I also asked participants to list the town or city in which they were living prior to admission and if they had another town or city which they regarded as their usual place of abode. This was to ascertain the degree of geographical mobility in the group, as is often found in addiction (Shaffer et al., 2004). Geographical mobility is also listed as an issue that can complicate the collection of epidemiological data on drug use patterns (Parry et al., 2009). This SAQ was tested via a pilot study and the questions were slightly modified to make them easier to understand based upon the feedback received from those participants. No



significant alterations to the SAQ were required. The second and third parts consisted of the screening tests for gambling and sex addictions [Appendices 5 & 6].

**i Test for Problem Gambling: the Problem Gambling Screening Inventory (PGSI)**

The test I used to detect disordered gambling was the Problem Gambling Screening Inventory (PGSI) (Bellringer et al., 2008) [Appendix 5]. Many tests are available to detect gambling disorders, but for reasons discussed below, this is the assessment tool that I selected for this research. The PGSI is a nine item screening test, with four possible answers per question, ranging from ‘never’, to ‘sometimes’, ‘most of the time’ and ‘almost always’. The symptoms that are assessed are derived from the symptoms for PG as listed in the DSM-IV-T-R (Hodgins et al., 2011). There is some criticism in the literature as to whether all of the symptoms for disordered gambling should be given equal weight in assessing for addiction (Nelson et al., 2009) but the PGSI is an internationally accepted screening test and its strength is that it is easy to administer, and it efficiently assesses for gambling disorders (Hodgins et al., 2011; Holtgraves, 2009).

It was adapted and abbreviated from the Canadian Problem Gambling Index which has 31 items (Centre for Addiction and Mental Health, Canada, [CAMAHA] n.d.). Cronbach’s alpha test was applied to all nine items in the PGSI, all of which scored over 0,9 demonstrating a high level of internal consistency (Bellringer et al., 2008). The PGSI has been used in several countries, including South Africa, and has been found to be a reliable and valid instrument for the detection of problem gambling

(Bellringer et al., 2008; CAMAH, n.d.; Orford, Wardle, Griffiths, Sproston & Erens, 2010). Scoring of this test is discussed in Section 4. 2.7 which addresses data analysis. The questions asked the participants if they had ever bet more than they could afford to lose, it asked about chasing losses, problems caused by gambling and if they had felt guilt or worried about having a gambling problem. The PGSI was evaluated as being the most appropriate test to detect a spectrum of gambling problems in the general population and is therefore an important instrument to use in screening for gambling disorders (Orford al., 2010; Holtgraves, 2009).

**ii Test for Sex Addiction: Revised Sex Addiction Screening Test**

The sex addiction screening test that I used was the Revised Sex Addiction Screening Test (R-SAST) (Carnes et al., 2010) [Appendix 6]. Tests measuring sex addiction generally assess three different areas relating to sexual behaviour. These are firstly, objective symptoms of sex addiction, for example, time spent engaging in certain activities. The second area is subjective symptoms of sex addiction, for example perceptions of preoccupation with sexual thoughts or activities, and ability to control these. Thirdly, tests address harmful consequences of the sexual behaviour (Hook et al., 2010). Hook et al. (2010) assessed 17 different tests that had been devised to detect or diagnose sex addiction. They concluded that the SAST (the original test upon which the R-SAST is based) is “a brief, face-valid measure of sexual addiction that is widely used in clinical practice. The SAST has strong psychometric support” (p. 246). They noted that the test was applicable only to heterosexual males and that

other tests had been developed for women and homosexual males due to the different patterns of behaviour in these groups.

The SAST was developed in 1988 by Patrick Carnes and, subsequently separate tests were developed for women and gay men by other researchers. Previous research into sexual addiction patterns in women did not reveal major differences between heterosexual and homosexual women, hence there was no need to develop separate tests for women, as had been necessary in the detection of sex addiction in men (Carnes et al., 2010). The R-SAST was developed to detect sexual addiction across a spread of populations to meet the need for one test for sexual addiction that would be valid across all populations and it has replaced the three separate tests. Carnes et al. (2010, p. 26) state that the test focuses on and measures the four core components common to sex addiction (and addiction in general). These are preoccupation, loss of control, affective disturbance and relationship disturbance. The R-SAST had good internal consistency as obtained by applying the Cronbach's Alpha which yielded an average score of .86 when tested on seven different populations, including male and female in-patients and out-patients receiving treatment for sex addiction, college students and clergy (Carnes et al., 2010). The test contained 20 core questions and 25 additional questions that measured specific aspects, viz. internet sexual behaviour, and questions that addressed unique groups: heterosexual men, homosexual men and women. It was decided that 45 questions would be too onerous for the survey participants complete. Therefore, the 20 core and six internet sexual addiction questions were asked, yielding a total of 26 questions that were completed by the

participants. This test covered the four components listed above, for example “Has sex become the most important thing in your life?” (measuring preoccupation) and “Has your sexual behaviour ever created problems for you and your family?” (measuring relationship disturbance).

Babbie and Mouton, (2001, p. 233) state that surveys are useful, as they provide for greater uniformity in data collection and are easily processed. It is important to note that screening tests do not provide a definitive diagnosis of an addiction but exist to alert the clinician to the existence of a problem. A thorough clinical investigation, generally by means of interviewing, is necessary to confirm any definitive diagnosis of an addiction (Carnes et al., 2010; Hodgins et al., 2011). This was done via my in-depth interview with the smaller sample of participants.

***c. Phase Three: In-depth interview guide***

The in-depth interview was designed to investigate trauma and family dynamics in the development of addiction and to explore the full spectrum of addictions and AID with the participants. It also examined previous treatment exposure and experiences. In-depth interviews are utilised in the qualitative research paradigm to enable the researcher to gain a thorough understanding of the participant’s perceptions on a particular range of issues. Gomm (2008, p. 229) prefers the term “loosely structured interview” to differentiate it from other interviews with the same name, such as police interviews. The reservations are noted, but in-depth interview seems to be the term most widely accepted in the literature (Babbie & Mouton, 2001; De Vos, 2005). Interviews offer the advantage of being able to explore the

participant's view in a detailed manner. Limitations include the participant giving information that is designed (even if unconsciously) to impress, shock or conform to what they believe the researcher wants to hear (Gomm, 2008) which would have impacted on the validity and reliability of the data. The interviews that I conducted were between one to two hours each in duration during which time I established rapport with the participants and checked the consistency of the information given to me by summarising and reflecting information back to the participants. In addition, I had the participant's completed survey form with me and I also had obtained information regarding their medical history and treatment, all of which provided a way of checking the accuracy of the information given during the in-depth interviews. Triangulation of data is utilised in mixed methods' research to enhance the validity of the findings (Creswell & Zhang, 2009).

Merriam (2009, p. 89) categorises interviews in terms of the level of structure used, from highly standardised to semi-structured to informal. I used semi-structured interviews where the interview schedule guided the process, the questions were used flexibly, but I ensured that I covered all of the questions during the course of interview. The in-depth interview was conducted using an interview schedule to ensure that areas relevant to the research question were covered [Appendix 7]. The sequence of topics covered was carefully planned to assist the participant feel comfortable and the interview began with their childhood and progressed chronologically to assist with the interview flow. The biopsychosocial model was utilised extensively in ensuring that I explored the participants' experiences of addiction in an holistic manner. Most of the questions asked were open ended to ensure that the interview proceeded in a natural way. Issues discussed were:

- **The participant's family of origin and experiences of trauma:** I tracked family relationships utilising the two dimensions measured by the FACES model (Olson, 1993) which were adaptability (looking at if the rules were rigid, if they adapted as the children matured) and cohesion (the degree of closeness experienced by the participant) and rules in the family. The discussion also covered any particular difficulties experienced by the family and if there were any other family members with addiction problems and then focused on their experiences of trauma exposure in childhood and adulthood.
- **Drug debut and the participant's drug history:** The literature suggests that the drug debut usually begins in adolescence (Liddle, 2009). Other research posits that males are more likely to initiate drug use to experience pleasure, whereas females are more likely to begin drug use due to stressful life events (Becker et al., 2012). The interview explored how the participants experienced the early days of their drug use and the early 'rewards' obtained. I explored their drug history and at what age they began using different drugs. I then asked when the participant first thought that he/she might have had a problem with drug use and what defense mechanisms he/she used to justify their drug use. I then explored with the participants what negative consequences they have experienced due to their drug use.
- **Gambling, sex and other addictions and addiction interaction:** I used the two screening instruments as a basis for discussing the participants' gambling and sexual behaviour and explored what troubled them about these behaviours. I then tracked back to when these behaviours had started, how it tied in with the substance use and its relationship (if any) to their gambling and/or sexual addictions. After these issues

had been explored, I looked more closely at the relationship between the behavioural and substance addictions. I then asked the participants about other process addictions such as work, food and eating, exercise and money. The entire addiction quadrant was explored with the interview looking at the participants' relationships with family, friends and partners and how their feeling states co -existed with their other addictions. The participants then described a typical day or week in their lives, to provide a clearer picture of their experiences as addicts and to clarify patterns of addiction interaction that had developed.

- **Consequences:** The participants described what losses they thought they had experienced due to their addictions.
- **Treatment:** I enquired from the participants if they had had previous treatment. If this was applicable, how they had been referred for that treatment, what their experience of the previous programmes had been, and how long they had maintained sobriety after treatment. For those who had not had previous treatment, I explored with them how they had been referred for this current treatment.
- **Future plans:** the interview concluded by discussing the participants' plans for their future.

#### **4.3.6 Data Collection**

This section describes how the data were collected, and how the research instruments described above were utilised. Each phase is described and is linked to one or more of the research objectives described in Chapter 1, and depicted in Table 4.1.

***Phase 1: Discussion groups with professionals***

***Research objectives 5 and 6:***

- *To establish how professional staff employed at in-patient rehabilitation centres understand and currently assess and treat MA and AID*
- *To make recommendations regarding treatment of addiction.*

A discussion group was held with professionals at each of the centres. Each discussion lasted approximately one hour to one and a half hours. These discussion groups took place in the same six week time frame as the other phases of the research were implemented, in keeping with the concurrent embedded research strategy utilised in this study. The venue was either in the boardroom of the centre or in a large office. I introduced the concepts of MA and AID to the professionals and the discussion followed the questions as set out in the schedule [Appendix 3]. I took notes throughout the discussion.

The purpose of the discussion groups was to gain an understanding of how practitioners working with addiction understood the concepts of multiple addictions and addiction interaction disorder. It was also hoped that they would yield information on ideas the professionals could have had about adaptations to existing treatment programmes to create a broader treatment approach to addiction.

Each participant had the question sheet in front of them and the discussions proceeded as follows: the question topics one to three were discussed. These items covered the professionals' experiences of addictions in addition to substances and the assessment and treatment of other addictions currently offered by their organisation. When we reached



question four, the participants were given an information sheet listing the four categories of addictions and the ten manifestations of AID as proposed by Carnes (2008), which was outlined in Chapter 3. This information was used to discuss questions 4 to 7 in which I explored the professionals' opinions on the usefulness of the concepts of MA and AID and also asked if their current treatment programme addressed the issue of addictions interacting and if not, whether they believed that it could be a useful topic to address in treatment. I wrote down the responses provided by the professionals for each of the questions discussed. I then transcribed the responses into a report.

### ***Phase 2: Screening and survey amongst in-patients***

#### ***Research objectives 1 and 4:***

- *To understand the profile of MA and AID amongst in-patients with substance use disorders in Durban, specifically, to establish the prevalence of sex and gambling addictions.*
- *To establish previous treatment exposure and its outcome amongst substance users.*

I approached the participants directly at two of the centres, where I was given the opportunity to address them whilst they were attending their morning group activities. At the third centre, the social work manager addressed the patient community about the research, which was the arrangement preferred by that specific institution. After the in-patients had been approached to participate, those willing to do so were placed into groups of about eight to ten, and they were invited to a room in which they would complete the SAQ. The room was either the group therapy room or the boardroom at the institution. I used the assistance on one occasion of an isiZulu speaking social worker for one group which was predominantly isiZulu

speaking. The isiZulu-speaking social worker translated some of the questions to participants and was on hand to clarify any queries arising from the questions. Only two participants in the group needed assistance to translate the questions into isiZulu. In all three centres, I explained the purpose of the research, as outlined in my letter to participants which was made available to all participants (Appendix 2.3). I explained further that I would invite some of the participants to take part in an in-depth interview, and that this would again be voluntary. Many of the participants asked to be included in this process and I thanked them and explained that I only needed a limited number of people for these interviews.

Finally, before distributing the questionnaires to the participants, I gave each of them the written consent form [Appendix 2.4], explained their rights as research participants, gave an opportunity for them to ask questions and requested them to sign the form. The consent forms for the in-patients also included granting me permission to review their medical and psychiatric information. No participants objected to signing the informed consent forms which have been kept in my research file.

I answered any questions before giving out the research questionnaires. I also explained that should any participant feel distressed by the process, I was available to speak with them and I would refer them to their counsellor, if necessary. Issues raised by participants were:

- Confidentiality: three participants asked about confidentiality and were reassured that their names would not be used in writing up the research. One of these participants also queried if I would have access to his counsellor's notes. I clarified that he was

- only consenting to my accessing his medical information and not any information he disclosed during consultations with his counsellor.
- Most groups requested clarification about sexual orientation, and I gave them the common terms of ‘gay’, ‘straight’ or ‘bi’ (meaning bi-sexual). This question seemed to engender a lot of anxious laughter, particularly in men only groups.

To ensure the anonymity of the participants, I had assigned a number to each SAQ, which had been written on the top right hand corner of the survey form. Before distributing the questionnaire, I wrote down the person’s first name and the initial of their surname in a separate book and allocated a number to them and gave the participant the corresponding questionnaire. I sat in the room with the participants and was available to clarify any queries. After the participants had completed the questionnaire, I checked through it to make sure that all of the questions had been completed, and asked for clarity if I could not read or understand the answer. I made sure that if any sensitive information was required, I spoke to the participant on his/her own. After the participants had left the room, I scored the gambling and sex addiction questionnaires and made a note of which participants could be suitable for an in-depth interview, based upon their scores on the screening tests. The method of selection of participants for the in-depth interview was described in the discussion on sampling, section 4.3.4.

I approached a total of 151 people to participate in the research, and 123 people participated, as depicted in Table 4.3. The only reason given to me personally by participants who declined to complete the SAQ was that they “did not feel like participating”. Most of the

refusals (12) came from the centre where I did not approach the participants directly, in accordance with its management's request.

**Table 4.3**      **Number of in-patients who participated versus refusals**

Institution	Total number approached	Number of refusals	Number of participants
1	41	3	38
2	86	13	73
3	24	12	12
<b>Total</b>	151	28	123

***Phase 3: In-depth interviews with participants with multiple addictions***

***Research objectives 2, 3 and 4:***

- *To investigate the role of family dynamics and trauma in the development of MA and AID amongst substance users.*
- *To explore experiences of multiple addictions and addiction interaction disorder amongst participants assessed as having a gambling and/ or sex addiction.*
- *To establish previous treatment exposure and its outcome amongst substance users.*

“The key to getting good data from interviewing is to ask good questions” (Merriam, 2009, p. 95) was the maxim I bore in mind during the interviewing phases of the study. My goal was to select 25 participants via purposive sampling to be interviewed. A total of 27 participants were selected using the criteria described previously were approached to participate in the in-depth interview. Two of the males refused; one stated that he did not want the interview to be recorded and the second did not give a reason. Both were Black African males who had positive scores for both sex and gambling addictions. However, there were sufficient participants who met the criteria and were willing to participate and many of the people who

had participated in the screening volunteered to be interviewed and many seemed anxious for an opportunity to share their addiction story with me. I spoke informally with many of the participants after the survey had been conducted, thanked them and explained that I was only able to conduct a limited number of in-depth interviews.

All of the interviews took place in a private office at the rehabilitation centre. Each participant had their rights explained to them and all signed the informed consent form. The interviews were recorded on a digital voice recording device and then later I transcribed the interviews verbatim. Twenty interviews lasted on average between one and a half to two hours each. Five participants (two males and three females) were seen on two occasions as their interviews were more than three hours in duration. These follow-up interviews took place with four of the participants later the same day, after a short break. The fifth participant, a male, was interviewed within the same week. All of the interviews were based upon the interview schedule and participants were asked a series of open ended questions on a range of topics and were encouraged to give detailed answers. I utilised interviewing skills such as reflection, summarizing, clarifications and minimal encouragers to talk to facilitate the interview process (Merriam, 2009; Gomm, 2008). Many of the participants thanked me for the opportunity to talk so openly about their addiction experiences. Most described great shame about their addiction, particularly the sexual addiction, and expressed relief at having the opportunity to talk about their experiences in an environment which they had experienced as being nonjudgmental and accepting. At the end of each interview, I de-briefed the participant and enquired if he/she would like to be referred back to their counsellor to talk further about any issues that had been raised in the interview. Two participants requested this

as they felt that they needed to discuss trauma-related incidents with their counsellors with whom they shared a good relationship. I, in turn, was de-briefed by my supervisors given the nature of the interviews. Detailed narratives emerged from the interviewing process and a considerable amount of data was gathered which enabled me to discern patterns in the participants' development of MA and AID. I was able to observe similarities and differences in their experiences, thus gaining an in-depth understanding of the nature of their addictions.

#### **4.3.7 Data Management**

The data collected consisted of written material and audio recordings. The data management plan was discussed with my supervisors and approved by the University Research Ethics Committee for human and social sciences. The written material consisted of the completed questionnaires from the surveys and the interviews with the mental health care professionals. It also consisted of the notes I had taken during the interviews with staff and the in-depth interviews, as well as the signed consent forms completed by the participants in all three phases of the research process. These papers have been placed into files and are stored in a locked cupboard in my study to which only I have access. These paper records will be retained in this locked facility for five years, after which they will be shredded. The voice recordings were downloaded by myself onto a portable storage device and deleted from the voice recorder. This device is stored with the other materials in the locked cupboard. The contents will be deleted after five years.

#### **4.3.8 Data Analysis**

Data analysis in a concurrent mixed methods design involves comparing the results from the quantitative and qualitative methods to see if the data shows similar or divergent trends. The data are analysed in a manner consistent with the type of data collected. Different sources of data are utilised to increase the depth of knowledge that is obtained from the study, as well as increasing the validity and credibility as well as the reliability and dependability of the findings, as will be discussed later.

##### ***Phase 2***

The 123 completed forms were entered into Epidata and analysed via SPSS 19. The data were analysed for trends and correlations, in accordance with the research objectives. The information sheet yielded an overview of the characteristics of the participants: their biographical information, data on patterns of drug use and their treatment history. The two assessment instruments were scored to ascertain whether the participant was positive for a gambling disorder and sex addiction. The PGSI has scores that range from 0 to a maximum of 27 points; a score of eight or above indicated the presence of problem gambling. A score of one or two indicated no problem and scores of three to seven indicated a moderate risk for problem gambling (Bellringer et al., 2008). Any participant with a score of eight or higher was coded as being positive for problem gambling. Those with scores between three and seven were coded for being ‘at risk’ for problem gambling. The R -SAST was scored as positive for sex addiction by the presence of six or more ‘yes’ answers on the core sex addiction questionnaire (items 1–20) and three or more ‘yes’ answers on the internet sex

addiction test (items 21-26). These were the criteria set by the authors of the screening instruments after extensive research and testing of these tests, as discussed in Section 4.3.5.

### ***Phases 1 and 3***

De Vos (2005) conceptualises the analysis and interpretation of qualitative data as comprising nine steps and these guided my analysis of the qualitative data. I employed thematic analysis with the data obtained from the group discussions and in-depth interviews. Braun and Clarke (2006, p. 78) contend that it is a “foundational method” in qualitative analytic methodology. I utilised their guidelines in conducting the thematic analysis of the qualitative data. Thematic analysis is defined as “a method for identifying, analysing and reporting patterns (themes) within data” (Braun & Clarke, 2006, p.79). The first two steps (De Vos, 2005) consisted of planning how to collect the data and collecting the data which also involved commencing the preliminary analysis. In my study, the group discussions were recoded via note taking (phase 1) and the in-depth interviews were voice recorded (phase 3). The data were managed through being transcribed by me, which is step three (De Vos, 2005). I had the advantage of conducting all of the interviews personally and doing the transcriptions myself, which is acknowledged as being a tedious and time consuming process, but it is valuable as, it facilitates interpretation of the data commences and assists with the researcher’s immersion in the data (Braun & Clarke, 2006).

After all of the interviews had been transcribed, I read through them carefully many times thus continuing the process of immersion in the data. This resulted in an intimate knowledge of the data, which facilitated the process of generating patterns, categories and themes (Braun



& Clarke, 2006; Buetow, 2010; De Vos, 2005; Gomm, 2008). This is step four in the process of qualitative analysis (De Vos, 2005). Braun and Clarke (2006) stress that the researcher plays an active role in generating themes and challenges what, in their view, is the naïve position that themes simply emerge from the data. They believe that the researcher needs to be aware of his/her theoretical perspective to ensure greater integrity in the research process.

Generation of themes is the core of qualitative analysis and the essence of thematic analysis (Gomm, 2008). I was assisted in this step by my supervisors who also read the transcripts and assisted me in generating the codes, themes and sub-themes. This is step five, which is described as “generating categories, themes and patterns” (De Vos (2005, p. 334) or as “generating initial codes” and “searching for themes” (Braun & Clarke, 2006, p. 87). De Vos (2005) lists step six as coding the data, in contrast to the methodology proposed by Braun and Clarke (2006), who state that codes are the most basic unit of analysis and they are either “data driven” or “theory driven” (p. 88), depending upon the intention of the research.

The coding method that I utilised was more theory as opposed to data driven, as I was guided by Olson’s Circumplex Model of Family Functioning (1993) when assessing participants’ family of origin, and Carnes’ (2008) classification of addictions and the theory of AID (Carnes et al., 2005) when coding data that dealt with those topics. After reading through the interview transcripts I wrote down codes that emerged such as “neglect by family”, in the case of the part of the in-depth interviews that discussed family experiences. This code, together with several others, was later incorporated into the broader theme of “family pathology”, utilising Olson’s (1993) dimensions of adaptability and cohesion.

The codes were combined into themes which were: family, trauma, drug use, gambling, sex, other addictions, addiction interactions, treatment and losses for the in-depth interviews. The themes for phase one (the group discussions with professionals) were: assessment of other addictions, current treatment approaches and their views on incorporating information on MA and AID into their treatment programmes. These themes were chosen through the process of “defin[ing] and refin[ing]” (Braun & Clarke, 2006, p. 92). Each theme was highlighted in the transcripts through the use of different coloured pens and coded by hand through highlighting the relevant texts and transcripts. The different colours represented major themes. After that the data, usually in the form of direct quotations from each of the participants, were placed into the specified themes and combined into preliminary reports on each theme. These direct quotations were selected because they illustrated the experiences very clearly. The themes were then scrutinized to look for trends, all of the time being mindful of the literature that informed this study, for example, the Circumplex model of family functioning (Olson, 1993) and AID (Carnes et al., 2005), and being guided overall by the biopsychosocial model that informed the research process.

Information that emerged from the data were categorised into different topics or themes. These were experiences of the family of origin, experiences of trauma (childhood and as an adult), drug debut and drug use history, gambling, sex and other addictions, and addiction interaction, consequences of addiction and treatment experiences. These themes were checked against the other interviews conducted during the study: both the in-depth and with the professionals. The trends and themes obtained from the interviews were compared to the information on the drug use patterns and incidences of disordered gambling, sex addiction

and childhood sexual abuse obtained from the broader sample (phase two) and against the literature reviewed as part of the study. This comparison or “triangulation” (Creswell & Zhang, 2009) of the data was done in order to increase the reliability or dependability of the findings.

The different experiences, opinions and perceptions of the participants were examined and contrasted, which are steps seven and eight: “testing the emergent understandings” and “searching for alternative explanations” (De Vos, 2005, p. 334). These themes were compared with previous research and literature to generate the report. The themes generated in the report did not represent a mere re-telling of the questions asked in the research, a frequent criticism of thematic analysis (Larkin, Watts & Clifton, 2006) but attempted to be a synthesis of the data obtained from this study and in relation to the existing body of knowledge. I was guided throughout the research process by my supervisors and the literature that I had consulted, both of which played an important role in assisting me to maintain the integrity of this method. The final step was to write up the findings, which are presented in Chapters 6, 7 and 8.

Thematic analysis is often criticized for being poorly implemented and ill-defined and for producing reports that tend to be repetitive and “tedious to read” (Buetow, 2010, p. 123). Braun and Clarke (2006) acknowledge that thematic analysis is a poorly defined method that is often implemented in a careless way which is why it has been subjected to so much criticism. This is a similar issue raised regarding sampling in the qualitative paradigm (Coyne, 1997). However, they believe that, if done correctly, it offers flexibility, is able to

summarise and highlight important aspects of data and can lead to the generation of “unanticipated insights” (Braun & Clarke, 2006, p. 97).

#### **4.4 VALIDITY AND RELIABILITY OF THE FINDINGS**

All research aims to produce findings that yield truthful answers to the research questions. Gomm (2008, p. 13) notes that the qualitative paradigm refers to these concepts as “credibility and authenticity” to denote validity and “dependability or auditability” for reliability, but that the terms refer to the same concepts. Creswell (2009) uses the terms validity and reliability to refer to research generated from both paradigms. Merriam (2009, p. 209) believes that, in the case of qualitative research, ensuring that the investigation is conducted in an ethical manner is essential to produce a useful study. All research, irrespective of the epistemology from which it originates, needs to be conducted with rigour to ensure that it has value.

Validity and credibility refer to “how research findings match reality” (Merriam, 2009, p. 213). Merriam (2009) distinguishes between internal validity, described above, versus external validity which refers to the extent to which the research findings can be generalised. Creswell (2009, p. 180) refers to this type of validity as “generalizability”. The quantitative and qualitative paradigms have sharply divergent views on the nature of reality: is it objective and measurable? (quantitative) or is it constructed by the actors? (qualitative) (Barusch, Gringeri & George, 2011). The mixed methods approach does not engage in these “paradigm wars” (Ngulube et al., 2009, p. 105) but instead focuses pragmatically upon the best way to

answer the research question. Nevertheless, the commitment to producing valid or credible research is vital and I took several steps to try to ensure this.

My sampling methods were designed to obtain data from respondents from different treatment centres that best answered the research questions, as described in sections 4.3.2 and 4.3.4. The intention was to conduct research with as wide a cross section of the substance dependent, treatment-seeking population in Durban as possible. A key method to improve validity in mixed methods research is through triangulation (Creswell & Zhang, 2009) and this is a widely accepted practice in social work research (Barusch et al., 2011). In this study, I applied the method of triangulation by obtaining data from different sources: survey forms and reading participants' medical charts (phase two, quantitative method) and through conducting in-depth interviews with professional staff and patients (phases one and three, qualitative method) with the aim of increasing the validity of the data collected. It is necessary to clarify that triangulation is also referred to in the literature as a specific type of mixed methods design which was developed to enhance and deepen research findings through utilising different methods and data sources (Creswell & Zhang, 2009). Triangulation of data was inherent to the research design utilised in this study and this design was chosen because of its strength in enhancing the value of research findings.

Reflexivity is noted to be a technique that enhances credibility (Sathiparsad, 2006). I was mindful of Harrison's (1994) thoughts on reflexivity, and was aware of my impact upon my research subjects. I found it challenging to conduct research interviews which, although one uses similar interviewing skills to counselling, had a different aim than my usual role as a

therapist. My supervisors were most helpful in assisting me to keep focused upon this role as a researcher. In terms of ethics, any participant who had issues arising from the research process would be referred to his or her counsellor for de-briefing or further counselling.

Reliability, or dependability refers to “the extent to which research findings can be replicated” (Merriam, 2009, p. 220). However, in the context of the social sciences, it refers to “whether the results are consistent with the data collected” (p. 221). I attempted to ensure this by consistency in my data gathering. As noted previously, I conducted all of the research myself which included conducting the interviews and transcribing and capturing the data. I received supervision regarding my data analysis to ensure that the results and reports were consistent with the data collected. Thus, many measures were taken to ensure that the analysis that I conducted was rigorous. I was guided by the relevant literature on data analysis, as well as being guided by my supervisors who are both experienced researchers.

Challenges encountered during the research process and steps taken to overcome them are discussed in Chapter 9.

## **4.5 ETHICAL CONSIDERATIONS**

Ethics need to be the cornerstone of any research undertaking (Merriam, 2009) and the researcher needs to ensure that his or her conduct is ethical. This was particularly important in my study, as the participants in phases two and three of the research were people who had been admitted for the treatment of a substance use disorder, and could therefore be considered as vulnerable. There are four fundamental aspects to research ethics that need to

be considered when undertaking research (Smith, 2008, p. 249). These were adhered to in the research design and implementation, as will be discussed below. The principles are:

- Autonomy, which involves respect for the individual's right to self-determination. In this research, all participation was strictly voluntary. The rights of the participants was explained to them prior to their participating in the research. Each participant signed an informed consent form (Appendix 2.4)
- Beneficence refers to the obligation to help the other and, in relation to this research the aim was to improve treatment offered for addiction. It was also anticipated that most of the participants would find the survey and interview helpful in that it could improve their understanding of their illness.
- Non-maleficence is the principle of not harming the participants through the research process. Special attention was paid to this principle regarding the respondents in phases two and three who were classified as vulnerable in terms of the UKZN "Codes of Conduct for Research" (2008). Several measures were taken to guard against any harm arising from this study. Firstly, the participants were seen in a therapeutic setting where they had access to mental health care professionals for individual counselling. I was thus able to refer a participant to their counsellor should that have been necessary. Secondly, I conducted all of the research personally and was available to de-brief any participants who required this. Lastly, the names of the participants did not appear on any of the survey forms and this list of names has been kept confidential. When writing up the interview transcripts and in the written report, all of the names were changed to protect the identity of the participants and their families. In addition, the names of specific towns, areas and treatment centres were

either omitted or changed for the same reason. The confidentiality was not, however, absolute, as personal information could have been required to be disclosed, if required by law and organisations such as the research ethics committee are entitled to inspect and/or copy the research records for quality assurance and data analysis. This was explained to the participants and included in the letter made available to them (Appendix 2.1)

- Distributive justice refers to treating all participants in a fair and equal manner. All participants were given an equal opportunity to participate in the research programme.

This study was undertaken utilizing the UKZN “Codes of Conduct for Research” guidelines (UKZN, 2008). Ethical clearance for this study was obtained from the Human and Social Sciences Ethical Committee at UKZN.

## **4.6 CHAPTER SUMMARY**

This chapter discussed the research paradigm that was selected and the techniques that were employed to answer the research questions. A mixed methods design was used, specifically the concurrent type, which, it was argued, is well suited to exploring the complex health issue of addiction. The three phases involved in the research endeavour were described. These were firstly, discussion groups that were run with mental health care professionals employed at the three selected sites. The second and third phases involved research with the in-patients. The second phase utilised the quantitative approach and involved a survey of patients admitted to inpatient treatment to assess for multiple addictions. The third phase consisted of



in-depth interviews of 25 participants selected purposively from the survey phase to explore MA and AID in a more in-depth manner. Phases one and three utilised the qualitative approach. The rationale for the selection of the research instruments was discussed and the methods of data collection, management and analysis were explained. The issues regarding validity and reliability of the data were discussed, and the ethical considerations that formed the basis of this research were examined. The following chapters present the findings of this study.

## **CHAPTER 5**

### **DATA ANALYSIS: SURVEY OF IN-PATIENTS**

#### **5.1 INTRODUCTION**

In this chapter, I present results obtained from the survey questionnaires that were administered at the three drug rehabilitation centres. The research objectives that this phase sought to understand were the profiles of patients undergoing treatment for substance use, to ascertain what percentage presented with sex and gambling addictions and to establish their previous exposure to treatment (objectives one and four). The participants completed a self-administered questionnaire and two self-tests: one for problem gambling and one for sex addiction, including internet sex addiction. The questions asked and the data obtained in this phase gathered wide-ranging information from the participants, in keeping with the biopsychosocial model that informed the research. The biological data focused on age, drug use history and health status; psychological data was gathered by testing symptoms of problem gambling and sex addiction; social data shed light on other factors such as employment and educational levels, previous treatment and the presence of addiction in other family members; the last factor also has biological dimensions. This chapter presents the results obtained from these questionnaires which provided valuable information regarding the general profile of the participants and on the prevalence of multiple addictions in the general in-patient population. The survey laid the foundation for the selection of participants for the in-depth interviews.

## **5.2 BIOGRAPHICAL INFORMATION**

This section reviews the personal profile of the participants, in terms of their age, sex and race, their educational, occupational history and marital status. It addressed the research aim of obtaining a profile of in-patients receiving treatment for substance abuse disorders.

### **5.2.1 Personal Profile**

A total of 151 participants were approached, as was described in the previous chapter. The Table 5.1 presents a summary of important characteristics of this sample.

In terms of racial profiles, 35% of participants were African, 12% were Coloured, 20% were Indian and 33 % were White. There were 28 female and 95 male participants which, according to the management of the three institutions, reflected the general ratio of female to male admissions at these centres. Most of the participants in this study were in the 21-29 year age group for both males and females. Participants ranged from 18 to 63 for males and 18 to 53 for females. The majority, 92% reported coming from different parts of KwaZulu Natal (KZN), with 67% from Durban, 12% from Pietermaritzburg, and 13% from other parts of KZN (mostly the South Coast or Empangeni region). Six percent lived in Johannesburg or the Eastern Cape. Ninety percent stated that they had been living in the same town prior to admission, and they considered this to be their usual place of abode.

**Table 5.1 Profile of participants in the study n=123.**

Factor	Profile	Male n=95	Female n=28	Total n=123	Total Percentage
<b>Age (Years) Range</b>	18-20	10	4	14	11%
	21-29	56	10	66	54%
	30-39	13	10	23	19%
	40-49	12	3	15	12%
	50-59	2	1	3	2%
	60-65	2	0	2	2%
<b>Marital Status</b>	Married	10	2	12	10%
	Divorced	8	4	12	10%
	Separated	2	4	6	5%
	Never Married	75	18	93	75%
<b>Educational Level</b>	Primary	11	1	12	9%
	Grade 8-11	52	9	61	50%
	Matric	26	8	34	28%
	Diploma	4	8	12	10%
	Degree	2	2	4	3%

Data on marital status are shown in Table 5.1. The majority of participants reported that they had never been married. A higher proportion of females reported being divorced than males. Fifty three percent reported that they had partners although two thirds did not live with them. In this study, a little over half (55%) of the participants reported that they did not have children. Most of the respondents with children reported that they had one child and were financially responsible for their children; two reported that their children had been adopted and they were therefore not responsible for those children. Two male participants reported

caring for children that were not their own, being orphans from their extended family. There was no statistically significant difference between the sexes regarding having children.

Most of the participants, 91%, reported that they were heterosexual. Three of the 95 males reported being homosexual, compared to four of the 28 females. Two females and one male reported that they were bisexual.

### **5.2.2 Education and Employment**

All of the participants reported having attended school and most had completed primary school. This was the highest educational level obtained for 11% of participants. Most had completed all or part of high school, with 28% listing matric as their highest level of education. More females than males reported tertiary qualifications.

An important finding was that 16% of this sample reported that they had never obtained formal employment after leaving school. Five percent of participants, mostly in the 18 to 20 age group, reported being fulltime students or scholars. Participants listed their occupations which are shown below in Table 5.2. However 79% of them were unemployed, and most of had been unemployed for over one year. The majority of people in the professional group were nurses, most of whom were female.

**Table 5.2 Occupational group of participants in percentages (n=123).**

Occupation	Never worked	Student/Scholar	Unskilled	Hospitality	Skilled/Technical	Sales	Professional	Total
Percentage	16%	5%	12%	9%	35%	11%	12%	100%

### 5.2.3 Admission to Rehabilitation

The participants were asked to list who had played the greatest role in their admission. The vast majority of the sample reported that they were in treatment voluntarily and that their families (43%) or self-motivation (40%) were the main reasons for admission. The minority, 13%, who reported that they were receiving treatment involuntarily, reported that they had been referred by the courts, their employers or pressured by family to receive treatment. Four of the 16 participants who had been committed by the courts reported that they had chosen committal as they could not afford to pay for treatment and listed themselves as receiving treatment voluntarily. Table 5.3 indicates the different referral sources regarding admission for treatment.

**Table 5.3 Referral sources of participants in percentages (n=123).**

Main reason for admission	Family	Self	Court	Employer	Church	Total
Percentage	43%	40%	9%	7%	1%	100%

### 5.2.4 Co-Occurring Medical and Psychiatric Conditions

This information was obtained from the participants' medical records. They had signed informed consent for me to have access to their medical records and the information was given to me by a professional nurse at each of the centres. All of the participants had undergone a detailed nursing assessment upon admission to the treatment facility. The majority of participants (84%) were not on treatment for any medical condition. The most common chronic medical condition was HIV with 5% of participants diagnosed as being HIV positive and all except for one participant were receiving Anti Retroviral Therapy. Other medical conditions included tachycardia, hypertension, diabetes and renal failure which were

found in individual cases. One participant was a quadriplegic, having suffered permanent neurological damage from intravenous use of methamphetamine. Acute medical conditions were broken legs sustained when under the influence of substances (two participants). Three participants, all males, were on antibiotic treatment for acute medical conditions, such as bronchitis and tooth abscesses.

Information regarding the participants' psychiatric diagnoses and treatment was also obtained from their medical records and discussed with the professional nurse who controlled these records. According to these records, a total of 30% of the sample was receiving psychiatric treatment and a further 3% were to be referred for a psychiatric assessment as the multidisciplinary team was of the opinion such that an assessment was needed. The latter group did not as yet have any formal diagnosis. Table 5.4 outlines the different psychiatric diagnoses given to the participants.

**Table 5.4 Co-occurring psychiatric disorders amongst participants (n=123).**

Psychiatric diagnosis	Total Number of Males (n=95)	Total Number of Females (n=28)	Total Percentage
Major Depression	2	7	7%
Anxiety Disorders	7	2	7%
Schizophrenia	4	1	4%
Personality Disorders	6	4	10%
Bipolar Affective Disorder	2	1	2%
To be diagnosed	4	0	3%
<b>Total</b>	<b>25</b>	<b>15</b>	<b>33%</b>

Anxiety disorders included PTSD, which was the diagnosis for half of that group (one female and four males) as well as obsessive compulsive disorder, which had been diagnosed in two of the males. Ten participants were two diagnosed with personality disorders: antisocial and borderline types. Five of the men were diagnosed antisocial personality disorder and all of the females and one male were diagnosed as having borderline personality disorder. Four participants were exhibiting some symptoms of mental illness but had not yet been assessed by the psychiatrist.

### **5.2.5 Other Family Members with Addiction**

Two thirds of the sample reported having relatives with addiction problems, and these results are reported in Table 5.5. Fathers were the most frequently reported relative with an addiction with 30% of participants reporting this, most commonly to alcohol. Participants of both sexes reported that they had more male than female relatives with addiction.

**Table 5.5 Percentage of reported addiction of participants' relatives (n=123)**

<b>Father</b>	<b>Mother</b>	<b>Brother</b>	<b>Sister</b>	<b>Uncle</b>	<b>Aunt</b>	<b>Cousin</b>	<b>Grandparent</b>	<b>Partner</b>
30%	13%	22%	8%	19%	8%	28%	8%	4%

## **5.3 DRUG USE**

These findings provide a detailed profile of the participants' history and patterns of drug use. The majority, 106 or 86% reported a history of poly-substance abuse. In the survey SAQ they were asked to list all of the drugs that they had used; the number of years they had taken each drug and the age at which they had begun using each substance. I did not include



cigarettes as part of this analysis, as they are not listed in the South African research (SACENDU) on drug trends against which comparisons were made. Participants were also asked to list their drug of choice. Table 5.6 outlines the number of substances used, as reported by the participants. The drug use history was also explored in the in-depth interviews to cross check the validity of the survey reports and to gain a deeper understanding of the impact of poly-substance use upon the participants, in keeping with the nature of the research design described in Chapter 4.

**Table 5.6 Number of drugs used by participants (n=123)**

Number of drugs	1	2	3	4	5	6	7	8	9	10	Total
Number	17	20	32	18	12	13	1	4	4	2	123
Percentage	14%	16%	26%	15%	10%	11%	1%	3%	3%	1%	100%

A quarter of participants reported the use of three different drugs. Table 5.7 lists the most common drugs of abuse which demonstrates notable differences in the drug use patterns between the male and female participants. There were similar proportions of men and women using dagga, alcohol and Whoonga. A higher proportion of women reported use of heroin, prescription sedative hypnotics, analgesics, amphetamines (which included diet tablets) and hallucinogens. A higher proportion of men reported using Mandrax, crack cocaine and methamphetamine.

## 5.7 Profile of drug use reported by participants (n=123)

Drug	Males reporting use n=98	Females reporting use n=28	Total reporting use n=123	Percentage reporting use of drug n=123	Percentage listing substance as drug of choice
Dagga	77	17	94	76%	11%
Alcohol	70	17	87	70%	23%
Whoonga	44	14	58	47%	33%
Crack cocaine	32	6	38	31%	8%
Cocaine	21	12	33	27%	6%
Ecstasy	21	10	31	25%	Nil
Mandrax	33	4	37	31%	4%
Amphetamines (including diet tablets, methamphetamine, Ritalin & methcathinone)	10	7	17	14%	4%
Heroin	6	5	11	9%	3%
Prescription sedative hypnotics	9	6	15	12%	4%
LSD and magic mushrooms	7	6	13	11%	1%
Prescription analgesics with codeine	2	3	5	4%	3%
Inhalants	3	1	4	3%	Nil
Other(gamma hydroxybutrate, Methadone)	1	1	2	1%	Nil

## **5.4 PROBLEM GAMBLING AND SEX ADDICTION**

The results obtained from the self-administered screening tests for gambling and sex addiction are presented. These tests established the prevalence of multiple addictions for the survey group of participants.

### **5.4.1 Presence of Problem Gambling**

The test used to screen for gambling disorders was the PGSI screening instrument, as described in Chapter 4. Twenty eight participants (23%) tested positive for problem gambling of whom 23 (24 %) were males and five (about one sixth) were females. Many of the participants who were evaluated as positive for problem gambling scored in excess of 20 out of a total score of 27 (where a score of 8 and above was the threshold for diagnosing problem gambling). This indicated that they had experienced many negative consequences from their gambling and had a high probability of having a severe gambling disorder. A further 13 males and four females scored in the 'at risk' range for problem gambling (13% of participants). In total, 36 % of the sample presented with some issues regarding problem gambling. There was no statistically significant difference between males and females and the presence of problem gambling when the Pearson's chi-square test was applied to the data. The balance of the sample, 63%, did not present with gambling issues. Many of the participants stated when filling in the self-administered questionnaires that they never gambled.

#### **5.4.2 Presence of Sex Addiction**

A total of 41% of the participants scored positive for sex addiction using the R-SAST in total, with 40% scoring positive for the core test of sex addiction. Specifically, 38 males (40% of males) and 11 females (n=28) scored positive for sex addiction.

#### **5.4.3 Presence of Internet Sex Addiction**

Thirty seven participants or 30% of the sample tested positive for internet sex addiction, four females and 33 males. The majority of these participants (35) also tested positive for sex addiction. The exception to this finding was two males who tested positive for internet sex addiction and scored below the threshold for sex addiction. Statistically there was a very strong association between sex and internet sex addictions, with  $p < 0,005$ . The sample was tested to examine the relationship between age group and internet sex addiction. There was a statistically significant relationship between these two factors, with 67% of internet sexual addiction occurring in the 21–25 year age group for both males and females ( $p = 0,03$ ). No such relationship existed between age and the other two addictions, namely, problem gambling or sex addiction.

#### **5.4.4 Relationship between Gambling and Sex Addiction**

A total of 30 participants, or 24% of the sample who tested positive or ‘at risk’ for problem gambling, also scored positive for sex addiction and/or internet sex addiction. There was a statistically significant relationship between sex addiction and problem gambling for males ( $p < 0,01$ ), but not for females ( $p = 0.35$ ). Thus there was a high probability that if a male had problem gambling, he was also at risk to have issues with sex addiction.

#### **5.4.5 Sexual Abuse as a Child and Relationship to Sex and Gambling Addictions**

Child sexual abuse is recognised as being a traumatic experience that can have long-term negative effects upon the survivor (Opitz et al., 2009). More than half of the women in the study reported childhood sexual abuse (15 out of 28 women), as opposed to eight of 95 (8%) the men. Of the total of 23 (19%) of the participants (n=123) who disclosed child sexual abuse, 15 (12%) were positive for sex addiction. The overall relationship between child sexual abuse and sexual addiction was statistically significant, ( $p < 0.002$ ). Out of the 11 women who tested positive for sex addiction (two of whom were also positive for internet sex addiction) nine had been sexually abused as children. This group was too small to analyse the statistical significance of this correlation. The relationship with the men between childhood sexual abuse and sex addiction is emphasized: seven of the eight men who reported childhood sexual abuse tested positive for sex addiction, with two of them also testing strongly positive for internet addiction (one scored six and the other five out of six on this scale).

By contrast, the relationship between child sexual abuse and problem gambling was less clear. No statistically significant relationship existed between these two factors in either the male or female groups. Of the 15 women who had been sexually abused, only two tested positive for problem gambling, with a further three being in the 'at risk' group. There was a stronger relationship amongst the eight male participants with three of the being positive for problem gambling and one testing 'at risk' for problem gambling. This group was, again, too small to test for a statistical correlation between these two factors.

## **5.5 PREVIOUS TREATMENT**

The findings from the questions regarding treatment addressed the research objective (number four) of establishing previous treatment exposure of the participants and the outcome of this treatment as measured by the period of sobriety after completing treatment. Previous treatment in the study referred to previous in-patient treatment, as opposed to out-patient treatment or attending self-help groups such as Alcoholics Anonymous (AA) or Narcotics Anonymous (NA). Forty four percent of participants in this study had received treatment prior to their current admission and previous exposures to treatment ranged from one to eight prior admissions. The percentage of women who had received previous treatment was slightly higher, with half of the 28 women reporting previous in-patient admissions, as opposed to 40 of the 95 men (42%). However, the males who reported a history of previous treatment reported more admissions than the females, having had an average of three or more in-patient admissions. Nine of the 14 women reported one previous admission for treatment of their addiction. The 21-29 year age group was the group that listed the most previous exposures to treatment.

Information on period of sobriety after leaving treatment was concerning. Some 85% of sample, both male and female, reported relapsing within one week to one month after completing treatment. During the informal discussions when administering the SAQ, many stated that they had used drugs whilst in the rehabilitation centre and several reported that they had been introduced to, and used, new drugs whilst in treatment. Only eight of the 54 participants (15%) who had received previous treatment, five males and three females, reported maintaining a year or more than a year's sobriety after discharge. Attaining over

one year's sobriety was most commonly reported after the second admission for treatment. Participants who reported four or more admissions for treatment were predominantly males (18 males and one female) and their average period of sobriety after discharge was, on average, less than one month.

## **5.6 DISCUSSION OF THE RESULTS FROM THE IN-PATIENT SURVEY**

The information obtained from the survey of 123 participants from the three rehabilitation centres is now discussed in the wider context of previous studies conducted both in South Africa and internationally.

### **5.6.1 Biographical Data**

The information on age, sex and race gathered in this study is compared to data gathered by other South African researchers in terms of the SACENDU project. In this study most of the participants (54%) were in the 21-29 age range. There were equal numbers of females (10) in the 21-29 and 30-39 year old age groups. The 18–20 year age group made up 11% of the sample. Parry et al. (2009, p. 693) conducted research throughout South Africa via the SACENDU network and noted a significant increase in the number of patients in the under-20 year age group presenting for treatment. The percentage of under-20s receiving in-patient treatment in Durban peaked at over 30% in 2005 (Parry et al., 2009). Dada et al. (2012) reported that this trend was more prevalent among young African males, but they found that the average age of in-patients was 29-32, slightly older than in the present study.

The average age of initiation into drug use in this study was 15 years of age. This finding concurs with that of Patrick et al. (2009) who conducted research on the longitudinal patterns of drug use in adolescents in South Africa and compared their findings to data from the US. They found that the 14 to 15 year age groups for youth in both countries were the most commonly-reported ages for initiation to drug use. It is known that drug use severely interrupts adolescence on many levels, from neurological development, to the acquisition of skills, to family relationships and wider relationships within the community (Liddle, 2009; Wagner et al., 2010).

In terms of the sex of the participants, 77% of the sample in this study was male, which is broadly similar to the trend gathered via SACENDU (Dada et al., 2012, p. 3), which reported that between 75% and 88% of admissions to in-patient treatment facilities during 2011 were male. They noted that this proportion is consistent throughout South Africa. The literature suggests that women experience more barriers in accessing treatment for addiction than men including increased stigma for women and the greater proportion of women with co-occurring psychiatric disorders or histories of trauma (Jack et al., 2011; Parry et al., 2009).

This study utilised the four traditional racial classification groups utilised in other South African research. In terms of race of participants, a smaller proportion of Black Africans were in treatment (35% of the participants in my study) relative to the demographics of KZN, where 86.8% of the population were recorded as being Black African according to the South African Census conducted in 2011 (Statistics South Africa, 2012 Census, p. 21). The SACENDU data from for six treatment centres in KZN found that 59% of in-patients were



Black Africans (Dada et al., 2012, p. 8). Pelzer et al. (2010) concur that far fewer Black Africans are presenting for treatment compared with their demographic makeup in the country. They recommend that new initiatives be launched to make treatment more accessible to this group which would include targeting unemployed youth for drug prevention education, and educating the caregivers of children and the youth about alcohol abuse (p. 14). The growth of community based drug prevention and treatment initiatives is being encouraged, with training of staff and quality control over the programmes an important feature to ensure that the treatment programmes are implementing an ‘integrated approach to substance dependence treatment’ (Department of Social Development, 2012 p. 94).

There are sampling differences between the two studies. The Dada et al. (2012) study gathered information from six treatment centres over a six month period and data were submitted by the staff at these centres. This present study utilised three centres and the participants were present during a specified six week period (with the exception of females at one institution) and data were collected directly from the participants.

The vast majority of the participants, 92%, came from KZN. A small number of participants came from other parts of South Africa. This was also found in research conducted by Parry et al. (2009) who noted in their national survey that very few patients who participated in their research had crossed provincial boundaries to access treatment. This is seen as an important research issue as it could affect epidemiological studies conducted on monitoring local drug trends. This also emerged as an important issue in the in-depth interviews, as participants from other provinces reported being able to access different drugs, such as methamphetamine

in the Western Cape and Gauteng, and this impacted on their addiction history and experiences, as will be discussed in Chapter 7.

### **5.6.2 Education and employment**

In my study 5% of the participants were students or scholars and most participants had completed some level of secondary school. This issue was explored in the in-depth interviews when I asked about the impact of the addictions upon education and employment. In the general survey, 79% of the participants were unemployed and 16% had never obtained formal employment after leaving school. Many of the unemployed participants stated that they had been without work for over one year. High community rates of unemployment, deviant peer groups and the easy availability of drugs are listed in the literature as being risk factors for adolescent drug use (Liddle, 2009; Wagner et al., 2010). Poor employment prospects are known to predispose young people to experimentation with drugs (Liddle, 2009; Shaffer et al., 2004). However, once abusing drugs or dependent upon them, the person is less likely to complete their education and acquire skills necessary to obtain employment. Once employed, substance abuse and dependence will have a negative effect upon performance in the workplace. Alemi et al. (1995) in evaluating factors that enhance or mitigate against a favourable response to treatment, state that being unemployed is a negative factor. Being employed and having a supportive employer is positively correlated with a better treatment outcome.

### **5.6.3 Admission to Rehabilitation**

In this study 83% of participants stated that they were self-referred or referred by their families and 87% stated that they were in treatment voluntarily. Being motivated for treatment with a “strong desire for help” (Alemi et al., 1995, p. 489) is positively correlated with a favourable treatment outcome. It was interesting that although 21% of the sample was employed, less than one third of these participants had been referred for treatment by their employer. This study did not address the role of employers, but it raises important issues for Employee Assistance Programmes being utilised to screen and refer people with addiction issues for treatment. Statutory referrals in this study were low, with 9% of the participants having been referred via the courts. Other research conducted in South Africa listed self and family referrals as a far lower proportion of reasons for admission to treatment: 40% of 610 participants from KZN and a national average of 42%, and 9% were referred by the courts (Dada et al., 2012). Parry et al. (2009) found that over 50% of patients admitted for in-patient treatment in centres throughout South Africa were referred by family, friends or themselves, a rate still lower than in this study. A possible reason for this could be that the present study utilised fewer treatment centres, only one of which admitted in-patients via the courts.

### **5.6.4 Co-occurring medical and psychiatric conditions**

In this present study, relatively few of the participants (16%) suffered from chronic physical ailments. This could be due to the fact that most were in the younger age group, and the mean age of participants was 25 years. The most common physical illness was HIV and all but one HIV positive participant was on anti-retroviral treatment. Thirty per cent of the sample was receiving psychiatric treatment (i.e. dually diagnosed), and a further 3% were to

be referred for a psychiatric assessment, but did not yet have a diagnosis. This finding is a lower proportion than found locally by Pfeiffer (2009) or internationally, where the rate of dually diagnosed mental illness was in excess of 60% (Sussman et al., 2008). A reason for this could be that 56% of this group had not previously received treatment and had not been exposed to mental health care professionals.

#### **5.6.5 Drug use**

Participants were asked to list all of their drugs of abuse as well as their primary drug, which was called their “drug of choice”. The use of drugs will be reported by discussing the drugs under separate headings, for ease of reference.

##### **a. Dagga and alcohol**

Most of the 123 participants reported using dagga (94 or 76%) and 70% of participants listed alcohol use. When comparing drug use patterns in this study to that reported in the literature, alcohol was reported as the most common drug of abuse in KZN by Dada et al. (2012), with 67% of participants reporting alcohol use. This is similar to my finding but only 16% of the Dada et al. (2012) participants reported use of dagga, as opposed to 76% in my study. Possible reasons for the difference in results between this study and the SACENDU research were discussed under section 5.6.1 and at the end of this section.

##### **b. Whoonga and heroin**

The third most frequently cited drug of abuse was Whoonga, with 44% of participants reporting its use and 33% of the sample listing it as their drug of choice. A few participants

who spoke to me during the survey said that they had experimented with Whoonga but had not liked its effects, but most of those using it commented that it rapidly became their drug of choice. I differentiated between heroin and Whoonga in my data collection. Heroin use was reported by 12% of my participants and 3% listed it as their drug of choice. The distinction between heroin and Whoonga was due to the differences in the chemical composition of Whoonga which contains substances other than heroin, usually dagga and sometimes cocaine and strychnine (Parry et al., 2009). It is important to note that the participants themselves differentiated between the two drugs. Another important difference between heroin and Whoonga is the method of administration. Most of the heroin users reported intravenous use, as opposed to Whoonga which is smoked. The SACENDU research did not differentiate between heroin and Whoonga (S. Dada, personal communication, 11.02. 2013). Parry et al. (2009) noted increased use of heroin/Whoonga between 1999- 2006 and a shift in the racial profile of users. In 2007, a far greater number of Black African patients were admitted with heroin as a drug of abuse with the percentage increasing from 13% to 52% during this seven year period. Far fewer participants in my study (12% of the sample) listed heroin as a drug of abuse and only one quarter of those using heroin listed it as a drug of choice. During the informal discussions during the survey and in some of the in-depth interviews, it was reported that heroin is often used to help lessen the “crash” when the effects of crack cocaine end. They also reported that the physical withdrawal symptoms from heroin forced them to continue using this drug.

### **c. Cocaine and crack cocaine**

Participants in this study differentiated between cocaine and crack cocaine and there were high incidences of reported usage of these drugs at 33% and 38% respectively. The SACENDU (Dada et al., 2012) study did not differentiate between these two drugs and the combined use was reported as being 16% for Gauteng and KZN. Parry et al. (2007) noted an increase in the use of cocaine and crack cocaine, but not among younger patients.

### **d. Amphetamines**

Only 5% of the participants in my study reported using methamphetamine which was incorporated into the general category of amphetamines where the overall usage was 14% and included Ritalin, ephedrine and diet tablets. Most of the participants who had used methamphetamine reported to me that they had used it either in Johannesburg or Cape Town. This was discussed during the in-depth interviews and the informal discussions when conducting the survey. Parry et al. (2009) reviewed drug trends in South Africa from 1996 – 2006 and observed that the use of methamphetamine was increasing rapidly in Cape Town but not in the rest of the country. This pattern has changed since 2006 and methamphetamine use has increased in the Eastern Cape but rates in KZN remain low at around 0.9%, however, use is being carefully monitored due to its link with criminality and the damage it causes, especially cancer (Dada et al., 2012).

### **e. Mandrax (Methaqualone)**

Proportionally more males reported using Mandrax, with 33 out of 95 (35%) men reporting its use, as opposed to 4 out of the 28 women. SACENDU recorded a far lower rate of 7.7%

(Dada et al., 2012). The differences in data collection methods between my study and the SACENDU study could have contributed to the differences in drug trends observed.

#### **f. Prescription and Over-the-Counter medications**

Abuse of prescription and over the counter (OTC) medication use in my study was 12% for sedative-hypnotics and 5% for painkillers. Females outnumbered males proportionally for abuse of these drugs. Dada et al. (2012) recorded an incidence of 1.3 % for both classes of drugs and noted that these drugs are primarily abused by older females.

#### **g. Poly-substance abuse**

One major difference in this study compared to other South African research was the percentage of people reporting the use of more than one drug. In this study, 86% of participants reported using more than one substance, and a quarter of them reported using three substances, with the range being from one to ten (see Table 5.6). Previous research indicated levels of poly-substance use at between 20% (Eastern Cape) and 65% (KZN) (Dada et al., 2012). This is an important trend to monitor as poly-substance abuse complicates the response to treatment (Flores, 2004).

#### **Differences in data collection methods between studies**

The data obtained in my study were gathered directly from the participants, as opposed to the SACENDU study which receives reports from staff at the treatment centres. I asked my participants to list all of the drugs that they had used, and was present when the participants completed their survey forms. I was available to answer any questions, for example, several

did not report alcohol abuse as they did not believe that it was a drug. By contrast, the SACENDU studies record information as received from participating treatment sites and rely upon the accuracy of data collected by staff at these sites (S. Dada, personal communication, 11.02. 2013).

### **5.6.6 Problem Gambling**

The percentage of participants testing positive for problem gambling in my study was 23% and a further 13% scored in the 'at risk' range. This means that 37% of the participants had issues with their gambling behaviour. Estimates of problem gambling worldwide vary, but the general estimate is between 1 to 2% prevalence rate (Sussman et al., 2011) and Bulwer (2003, 2006) states that a similar rate should be expected in South Africa. The rates found in my study are much higher than the estimates for the general population. Another factor which emerged is the relationship between substance use and problem gambling. In this study all of the participants who were positive for problem gambling had histories of poly-drug use, which included illicit drugs. Only one male participant in the 'at risk' for problem gambling category had listed alcohol as his only drug of abuse. All of the other participants in the 'at risk' group had histories of poly-drug abuse.

Research indicates a high co-occurrence rate between problem gambling and cigarette smoking of 50% and a 40% co-occurrence rate between problem gambling and alcohol use whilst the co-occurrence rate between illegal drugs and problem gambling was 20% (Sussman, 2011; Wareham & Potenza, 2010). Bulwer (2003, 2006) found that 30% of her sample of 100 pathological gamblers had alcohol abuse problems and 6% and 3% reported



issues with illegal or prescription drugs respectively, again much lower co-occurrences than in this study. It is important to note that in the present study the participants were all diagnosed with substance dependence, as opposed to a gambling disorder.

### **5.6.7 Sex Addiction**

In this study, a total of 41% of the participants tested positive for sex addiction, and most of these reported poly-substance abuse. A total of 40% tested positive for core sex addiction and a lower percentage (30%) were positive for internet sex addiction. Most of these (67%) were younger males in the 21-25 year age group. These findings are consistent with that of Sussman et al. (2011) who estimate concurrence rates of 40% for sex addiction with cigarettes, alcohol and drugs. Carnes' (1991) research found similar co-occurrence rates of 43% with sex addicts reporting chemical addiction.

### **5.6.8 Sexual abuse as a child**

In the present study, more than half of the women reported childhood sexual abuse (which was explored with some of the participants in the in-depth interviews) and eight out of 95 men reported childhood sexual abuse. The overall rate for reported childhood sexual abuse was 19%. There was a clear relationship between childhood sexual abuse and sex addiction in my study for both males and females. Carnes (2008) explains the relationship between sex addiction and sexual trauma as compulsive repetition of childhood trauma, and it is therefore vital to obtain a thorough history from the client when investigating sex addiction. Both the SAST and the R-SAST ask about childhood sexual abuse for this reason (Carnes et al., 2010).

None of the local literature on drug treatment investigated this relationship, despite an extensive effort to find such research. There was excellent local research on childhood trauma (which includes childhood sexual abuse) that reveals disturbingly high rates of trauma exposure in South African youth. Collings (2011) found that 81% of his sample reported exposure to some form of trauma during their childhood. Estimates of the worldwide prevalence of childhood sexual abuse are 7–36% of female children and 5–10% of male children (Mathews et al., 2007). International research that investigates the relationship between childhood trauma and substance abuse concludes that women with addiction issues have stronger histories of childhood trauma and that trauma is a greater causative factor in the development of addiction amongst women (Becker et al., 2012; S. Johnson et al., 2010).

## **5.7 CHAPTER SUMMARY**

This chapter has presented and discussed the results from the quantitative phase of the research. It addressed the research objectives relating to profiles of the participants, prevalence of sex and gambling addictions and exposure to previous treatment. The 123 participants in this phase presented general trends for substance use, gambling and sex addiction, which provided the context and background for the selection of the participants for the in-depth interviews, in accordance with the research design. The data obtained from the survey indicated very high levels of poly-substance abuse, with 86% of the participants reporting the use of more than one drug. These are higher levels than those found by other South African researchers. One reason for the discrepancy could be the differing methods of data collection. Multiple addictions were evident in this sample, with 37% having issues with

gambling and 41% having issues with sexual and internet sexual addictions, with a concurrence rate of 24%. Fewer than half of the participants, 46% of the sample, were assessed as having only a substance dependence addiction. These findings have established the scope of the problem of multiple addictions. The next chapters will analyse the data obtained from the two qualitative phases of the research which investigated the participants' experiences of their addictions and the professionals' understanding of MA and AID. This information will add depth to the information gathered in the survey phase to provide a comprehensive understanding of the phenomena of MA and AID.

## **CHAPTER 6**

### **DATA ANALYSIS: DEVELOPMENT OF ADDICTION AND SUBSTANCE USE DISORDER**

#### **6.1 INTRODUCTION**

This chapter creates the background for understanding the context within which the participants developed their addictions. The information obtained from the in-depth interviews and presented in this chapter discusses the second aim of the research, which was to investigate the role of family dynamics and trauma in the development of the participants' addiction. Utilising the biopsychosocial paradigm which provided an holistic framework, I explored the factors that contributed towards the participants' development of their unique addictive illnesses. Thematic analysis was utilised, as described in Chapter 4, and the themes discussed below were selected based on the processes of immersion in the data, being guided by the relevant theories that informed the study and by my supervisors. Eight of the participants were females, and 17 were males. A brief biography of each participant is contained in Appendix 8. The chapter concludes by exploring the participants' experiences of their presenting addiction to substances.

#### **6.2 DEVELOPMENT OF ADDICTION: THE ROLE OF THE FAMILY OF ORIGIN**

A summary of salient information about the male participants is displayed in Table 6.1 and in Table 6.2 for the females. The tables summarise data regarding age, race, sexual orientation and the highest educational level attained by the participants. It lists three important aspects

relating to family and trauma: childhood sexual abuse, other addicts in the family or origin and placement by the courts in alternative care. A brief biography on each is contained in Appendix 8.

**Table 6.1 Profile of male in-depth interview participants (n=17)**

Name	Age	Race	Sexual orientation	Level of education	Childhood Sexual abuse	Addicts in family	Placed in care
<b>Males</b>							
Andy	34	White	Heterosexual	Matric	No	Yes	No
Ben	25	White	Heterosexual	Matric	No	Yes	No
David	40	Asian	Heterosexual	Matric	No	Yes	No
Joe	35	White	Homosexual	Matric	Yes	Yes	No
John	28	Black	Heterosexual	Grade 11	No	No	No
Krish	26	Asian	Heterosexual	Grade 11	No	Yes	No
Lloyd	22	Black	Heterosexual	Matric	No	Yes	Yes
Lwazi	22	Black	Heterosexual	Grade 11	No	Yes	No
Martin	23	Coloured	Heterosexual	Grade 8	Yes	Yes	Yes
Paul	34	White	Bisexual	Diploma	Yes	Yes	No
Peter	23	Coloured	Heterosexual	Grade 7	No	Yes	No
Raj	51	Asian	Heterosexual	Matric	No	No	No
Sagren	18	Asian	Heterosexual	Grade 10	No	Yes	Yes
Sam	22	Black	Heterosexual	Grade 11	No	Yes	No
Sipho	23	Black	Homosexual	Matric	No	Yes	No
Thabo	22	Black	Heterosexual	Matric	No	Yes	No
Tony	48	White	Heterosexual	Grade 10	No	Yes	No

**Table 6.2 Profile of female in-depth interview participants (n=8)**

Name	Age	Race	Sexual orientation	Level of education	Childhood Sexual abuse	Addicts in family	Placed in care
<b>Females</b>							
Anna	25	Black	Heterosexual	Matric	Yes	No	No
Ayesha	25	Asian	Heterosexual	Grade 10	Yes	Yes	No
Cassie	52	Coloured	Bisexual	Matric	Yes	Yes	Yes
Daisy	31	Black	Heterosexual	Grade 11	No	No	No
Jill	28	White	Homosexual	Grade 7	Yes	Yes	Yes
Kelsey	19	White	Bisexual	Matric	Yes	No	Yes
Mandy	36	White	Heterosexual	Matric	Yes	Yes	Yes
Pria	19	Asian	Heterosexual	Grade 10	No	Yes	No

### 6.2.1 Family relationships

Carnes (2008) contends that the family of origin plays an enormous role in the development of addiction, because scenes from childhood are frequently re-enacted in the addictive patterns displayed by the addict. This was the reason that I asked the participants how they had experienced their family growing up, utilising the two dimensions measured in the Circumplex model of family functioning by the Family Adaptability and Cohesion Scale (FACES) assessment tool derived from this model (Olson, 1993, 2001, 2011). These were emotional closeness and bonds (the cohesion dimension ranging from enmeshed to disengaged), and how rigid or flexible rules and family roles were, and how discipline was experienced (the adaptability dimension, ranging from rigid to chaotic). Most of the 25 participants had experienced some degree of family pathology; the most common pattern described was chaotic and disengaged. The chaotic pattern of relationships was more

commonly identified in this study which was different than research findings from studies conducted in the US by Carnes (2008) and Opitz et al. (2009) who found rigid and chaotic patterns to be the most common pattern of family pathology.

Chaotic and disengaged families function without clear rules and boundaries and members do not feel emotionally connected towards one another. Opportunities for learning and modeling adaptive behaviours are limited due to the lack of clear rules and poor emotional connectedness within the family. This was what those participants described clearly in the interview process. A few participants experienced their family of origin as rigid and disengaged, which was the most commonly-found pattern reported in the research studies listed above. The in-depth interviews revealed that most of the participants believed that they had not received adequate nurturing or the role modelling as a child. I will now focus on specific elements in the Circumplex model and link it to the participants' experiences.

#### **a. Rules and Roles in the Family: Adaptability Dimension**

##### *Experiences of rigidity in the family of origin*

Olson (2000, p. 149) defines rigid families as those where there is one person in charge who is autocratic. Roles do not change over time in response to the developmental changes in the family or the individual members. Half of the participants in this study reported rigid relationships but not all experienced disengaged family relationships. The literature suggests that rigidity results in the child feeling that they can never measure up to these exacting standards of perfection, resulting in feelings of shame and discouragement (Bradshaw, 2005; Carnes, 2008; Hall and Webster, 2007). Tafà and Baiocco (2009) noted that family rigidity,

especially in the father, is linked to substance abuse, more commonly in boys. Participants described feeling frustrated and rebellious, especially when the parents themselves abused alcohol, thereby being seen as inconsistent and hypocritical. Another issue was if they had been treated differently to their siblings due to factors, such as age or sex. Krish, 26, stated:

*Family relationships, it was kind of hard because my Dad used to abuse us. I had a tough life growing up. If you did anything wrong he'd take the belt, take the sjambok and hit me. If I got bad grades at school, he should hit me, if I did anything wrong at home, he should hit me: just me, not my two sisters. I was afraid of my Dad growing up. It was very, very strict at home; I had to be at home all of the time.*

Krish expressed the feelings of powerlessness and frustration experienced by many of the participants at their parents' rigid rules. It also reflected the growing child's bewilderment at not being able to please the parent and a strong belief that "I am a bad, unworthy person" (Carnes, 2001, p. 152), the first in the core beliefs common to all addiction. Hall and Webster (2007) note that children can feel discouraged and eventually believe that they will never be able to measure up to their parents' high standards and demands, which is evident in these participants' experiences. Many of the participants felt discouraged in their families.

Most of the female participants in the study who had not been institutionalised reported that they ran away from home, all of them doing so because they felt that their families disapproved of them. Ayesha recalled her parents' behaviour towards herself and her two older sisters. Both parents abused alcohol heavily and were, according to her, inconsistently



strict with her. Her parents punished her harshly with little explanation as to why they were punishing her in that particular way:

*They were strict. We weren't allowed to do as we pleased. That's why I ran away from home. My two older sisters ran away from home. In fact my mother threw them out of the house! One was 16, the other was 15! They went out to a party and they stayed overnight and the next day when they came home, my mother threw them out. And the older one, she never came back home.*

Ayesha expressed profound emotional pain due to the rejection that she had experienced from both parents and she expressed anger at their unbending, inflexible rules when enforcing discipline, which is a characteristic of rigid families.

#### *Experiences of chaotic structure in the family of origin*

The opposite of the rigid family style is the chaotic style where rules are not clearly defined and if they exist, they tend to be arbitrary and inconsistent. Roles are not clearly demarcated and there is frequently role reversal, with the children taking on adult responsibilities. Parents exercise “poor or little leadership” (Olson, 2000 p. 149). More participants reported a chaotic family structure as opposed to a rigid structure. Cassie, 52, described her family:

*So there was no role modelling at home. Dad was never there! Mom was never there! So we were left on our own. Nobody was looking after us. We were running wild! (laughs)*

This chronic parental neglect resulted in Cassie and her siblings being placed in different children's homes. Cassie described how she stole food and began prostituting at an early age which demonstrated very clearly the lack of any effective rules or role modelling by her parents (refer to appendix 8.3 for more information on Cassie's biography). Tony, 48, described living with his father and stepmother in this way:

*My Dad's home, basically he wasn't there most of the time. I could basically do anything I wanted. Me and my stepmom, we never got along, ah, also for the fact that she used to say bad things about my mothers' family. There weren't any rules.*

Tony experienced this lack of structure as rejection and found acceptance in deviant peer groups from the age of nine, where he was introduced to drugs and criminal activities. Participants from chaotic families described feelings of insecurity and neglect by their parents in that their behaviour was not closely monitored, which gave them opportunities to begin using drugs and, in some cases, to join gangs. In some cases, such as with Peter, the family became chaotic after his father was murdered. His mother was unable to control her two sons and gave up trying to discipline them. Many participants described harsh and inconsistent rules and punishments which existed before the onset of drug use (which was, on average, at the age of 15). However, once the parents became aware of the participants' drug use, they escalated the same disciplinary methods that had not worked previously, such as beatings, and applied them in an inconsistent fashion, as described by Tony and Krish.

### **b. Emotional Closeness: Cohesion dimension**

Cohesion is the second dimension measured by the Circumplex Model of Family Functioning (Olson, 1993, 2000, 2011). Cohesion is consistently mentioned in the literature as being a protective factor for effective families (Benzies & Mychasiuk, 2008; Bhana & Bachoo, 2011), as well as in preventing substance abuse in adolescents (Branstetter et al., 2011; Liddle, 2009). Poor cohesion has been found to be associated with early initiation into drug use (Habib et al., 2010; Sussman et al., 2008; Tafà & Baiocco, 2009). In Olson's model cohesion, like adaptability, is conceptualised as existing on four levels. Cohesion ranges from very little (disengaged families) to very high levels (enmeshment), again with both ends of the spectrum reflecting pathology. In this study as in previous research, disengagement was a common finding when investigating the quality of family relationships (Bhana & Bachoo, 2011; Carnes, 2008).

#### *Experiences of disengaged relationships in the family of origin*

Most participants experienced disengaged relationships in their family of origin which was described in families with pathological rule structures and they believed that their parents were busy with their own lives. Several of the participants had been orphaned and the loss of their parents was not dealt with in their families. Cassie stated:

*Closeness? Well, there was no closeness! The whole family: there is no connection with family. I have no happy memories. As children, we had no bond.*

Sagren described endemic conflict in his family, “funny relationships” by which he meant incest between his aunt and grandfather and very little emotional support from his parents who had separated when he was a small child. Many participants described emotionally disconnected relationships within their families. Joe’s father re-married soon after his mother’s death when Joe was nine years old and they started a business which took up most of their time. He described his family life in the following manner:

*Basically [during] the whole of High School I never saw my parents.*

*They would get home very late after my sister and I were in bed, and leave early in the morning. We communicated by notes, and there was food left in the microwave. My relationship with my dad was non-existent...*

In fact, Joe noted that it was “amazing” that he and his sister had not developed drug problems sooner, as they were totally unsupervised and received very little guidance from their parents. These experiences were reflected in the literature, for example, Opitz et al. (2009) reviewed family functioning in female sex addicts and found that participants from disengaged families did not feel emotionally supported due to the lack of cohesion. This was also the experience of the participants in this study.

Only one participant, Raj, described an enmeshed family, where he experienced excessive closeness and he felt unable to develop as an individual due to his family discouraging him from having friends or going out to pursue individual interests or activities. His way of coping with this was by rebelling against his family after he completed his schooling. He met

his wife and had a child out of wedlock at the age of 20 years, which was difficult for his family to accept. His wife was a problem drinker and his family had a poor relationship with her. Raj selected a partner that his family did not approve of and this resulted in him becoming emotionally disconnected from his family of origin.

### **6.2.2 Other family problems**

Other issues in addition to dimensions relating to structure and emotional connectedness were mentioned by the participants and are described below.

#### **a. Polygamy**

One participant, Daisy, 31, mentioned that she was the eldest child in her father's second family which lived as a traditional, polygamous unit. Both wives and the children lived on the same property and there was a lot of jealousy and conflict between the two families. This escalated further after her mother died and her father took in a third wife. Daisy had to leave school early and parent her siblings, which she bitterly resented.

#### **b. Secrets kept**

Several participants described either discovering devastating secrets or having to keep secrets from the family. Lloyd was not being told about his mother's suicide and learned about it when he overheard teachers talking about his family. Two of the men, Joe and Siphon, had to hide their homosexuality from their families who refused to accept their sexual orientation. Perhaps the most damaging secrets kept were those of child sexual abuse, which will be discussed in Section 6.3.1.

**c. Post-divorce conflict**

Tony's parents had experienced an acrimonious divorce. Whenever he misbehaved, he was threatened and rejected by being told to move to the other parent, which resulted in poor discipline and his feelings of insecurity and being unloved as he grew up (refer to appendix 8.25 for Tony's brief biography).

**d. No permission to grieve**

Joe's mother was killed in a car accident when he was eight years old. Within two months after her death, all memorabilia and photographs of her had been removed by his father. His father had never accepted Joe's homosexuality which Joe interpreted as a further denial of who he is by his father, again reinforcing the belief of being an unworthy, unlovable person (refer to appendix 8.12 for Joe's brief biography).

**e. No acknowledgement of birth family**

Kelsey moved between different foster homes shortly after her birth until she was placed with her permanent family when about five years of age. She stated that she was never allowed or encouraged to ask anything about her birth parents, and talked about how her biological mother had thrown her away. She had no information about her birth family, which she found hurtful and confusing.

**f. Poor relationships with parents**

Very few participants reported having positive relationships with their parents. Several participants had never known their fathers and many were abused or neglected by their

fathers either physically, sexually (for the women) or emotionally. More participants described closer relationships with their mothers who, even so, were often unable to protect or guide their children.

**g. Parents and other family members as addicts**

Over half of the participants' fathers had addiction problems and several had mothers and siblings addicted to substances or gambling. This caused a lot of sadness and fear amongst the participants, which often turned to contempt when they became teenagers, and to despair when they realised that they had repeated this pattern with their own children.

**h. Poverty or severe financial problems**

This was mentioned as a challenge by about half of the respondents and links back to the broader social context within which families exist. Many talked about not ever having new clothes, insufficient food at home or no electricity. Martin, 23, explained, when I asked him what he thought his main challenge was as a child:

*“Ja, I’d say poverty, mostly. Things were very hard. I remember that I used to go to school barefoot, from class one to class two, I used to go to school barefoot, and the other children they used to tease me most of the time. Worrying me, bullying me.”*

These events all have a common thread: the child’s identity, ability to feel safe and loved and sense of being accepted for who he or she is was not acknowledged; in some cases it seemed that it was actively undermined by the parents. Such situations are exacerbated by broader

societal issues such as poverty, lack of access to decent housing, educational, vocational and healthcare opportunities which amplify and reinforce the factors impacting negatively upon the individual's development. This undermining of identity sets the stage for developing the addicts' four core beliefs (Carnes, 2001) and teaches them to present a false self or exterior to the world to cover up this sense of inadequacy. When a child feels rejected, they are at risk to adopt compartmentalisation as a coping strategy, in which they hide parts of themselves and learn to keep different parts of their life separate. This is a feature of addiction, which is hidden from others and thrives upon secrets and covering up, resulting in further rejection by significant others, thus re-creating family of origin scenarios.

### **6.3 DEVELOPMENT OF ADDICTION: THE ROLE OF TRAUMA**

The experiences of the participants revealed that many of them had been exposed to severely traumatizing experiences both as children and as adults, echoing the literature which described a complex relationship between trauma and addiction.

#### **6.3.1 Experiences of Trauma in Childhood**

The development of addiction has been strongly linked to exposure to trauma in childhood (Carnes, 2008; C. Johnson et al., 2010). Research into childhood trauma has resulted in calls for a specific diagnosis, developmental trauma, to be recognised, as PTSD does not adequately account for the complexity of childhood exposure to neglect and abuse (Schmid et al., 2013). Amongst the current group of participants, most reported incidents of childhood trauma which ranged from physical abuse, sexual abuse (including incest), domestic violence



and the death of a parent. Most of the participants reported multiple incidents of trauma. Cloitre et al. (2010) note that exposure to different types of trauma complicates the eventual adjustment of the individual. This study found that a higher percentage of the female participants had been exposed to childhood trauma than the males, particularly sexual abuse. Amongst the women who participated in the in-depth interviews, six of the eight reported childhood sexual abuse, as did half of the women in the general survey. This finding is similar to that of Opitz et al. (2009) and Van der Kolk et al. (2005) that women are more likely to be victims of intimate interpersonal violence prior to the onset of addiction. The types of childhood trauma that were identified by the participants are depicted in Table 6.3.

**Table 6.3 Types of childhood trauma identified by participants (n=25)**

	Physical Abuse	Sexual Abuse	Domestic violence	Loss of parent*	Institutionalisation
<b>Females</b>	3	6	2	4	3
<b>Males</b>	7	4	3	8	3
<b>Total</b>	10	10	5	12	6

\* Loss incorporates death, divorce where no contact was maintained with a parent

#### **a. Physical abuse**

Several participants described being physically abused or disciplined by beatings as children. The women's accounts of physical abuse were generally more severe, as can be seen from the brief biographies. However, all of the participants who described the physical discipline believed that this was abusive and many reported that it made them feel resentful and rebellious towards their parents. Poor relationships with parental figures are positively

correlated with early experimentation with drugs (Liddle, 2009). Two males described receiving beatings from the South African Police Service who also stole money and drugs from them when they were teenagers. There is discussion in the literature that addiction and trauma share a complex relationship. Trauma can result in a person using an addiction to self-medicate (Becker et al., 2012). However, once in an addictive cycle, the person is also more vulnerable to trauma because their addictive behaviour places them in risky situations where they are more likely to be exposed to trauma (Driessen et al., 2008; S. Johnson et al., 2010).

#### **b. Childhood sexual abuse**

Many of the participants reported childhood sexual abuse: six (out of the eight) females and four males. These rates were higher than the general statistics on prevalence of child sexual abuse, which are already ‘disturbingly high’ (Kaminer & Eagle, 2010, p. 19) and estimates worldwide are 7–36% for girls and 5–10% for boys, as noted in section 2.5.2 (Mathews et al., 2010). Half of the women who reported childhood sexual abuse had experienced incest and all had been unable to disclose the exploitation for various reasons. Firstly, they feared that disclosure would end all contact with their mothers, which was what the perpetrators had threatened. A second reason was that they were financially dependent upon the perpetrator. Jill, 28, was sexually abused by her brother. She was living as a runaway and had sex with him and his friends in exchange for food and shelter (see appendix 8.5 for Jill’s brief biography).

A third reason for not disclosing is explained by Mandy who feared that she would not be believed or would be blamed for the sexual abuse (see appendix 8.7 for her brief biography).

*“My brother started abusing me as soon as we got into the children’s home... I was about five and he is five years older than me; I kind of think that he was abused by my father as well. He abused me for years. He was 16 and he still would corner me and push his thing into me, anywhere, like at a certain time of day the laundry was empty and he would send someone to call me, or send someone to ask me to fetch something. He was very cunning and manipulating. And while he was busy he would call all his friends to come and have a turn. And if I’d ever said anything, it would be my word against all of theirs.”*

Mandy’s experiences and descriptions captured the overwhelming feelings of powerlessness felt by all of the participants who had been sexually abused. They had no ability to influence where they lived, who cared for them or who touched their bodies. They all described dissociating from the abuse and focusing on how it was going to benefit them, for example, affording them food or access to their mother. These experiences made their transition to prostitution and heavy drug use understandable, as drugs offered a route to oblivion. In addition to the incest, these three women, together with the rest of the women who reported childhood sexual abuse, stated that they were raped during their childhoods, sometimes on many occasions.

Many of these attacks happened when they had been out buying drugs, and their assailants were either by the dealer or his customers. None of the women disclosed the rapes as they had felt responsible for them, due to the circumstances under which the attacks had taken place. This further increased their risk of coping with trauma by using drugs and other addictive behaviours. Anna, Kelsey and Ayesha expressed bewilderment that, as adults, they had had so many different sexual partners and believed that they needed to have sex. All of them thought that a more normal response should have been an intense aversion to sex. Carnes (2008) describes this as part of the complex reactions to trauma, specifically trauma re-enactment and trauma bonding.

Four of the male participants reported childhood sexual abuse, one case of which was incest (a maternal uncle), reported by Martin. His disclosure of the incest occurred during the research process and this was his first disclosure. Martin said that no one had ever asked him about abuse previously, despite his having lived in a Children's Home for five years. The second man, Paul, reported being simultaneously sexually abused by a doctor and the headmaster of the school where he was a boarder from the ages of 8 to 13 years. The headmaster ran a sex ring into which the participant was inducted and in which he participated from the ages of 9 to 13. He is now addicted to child pornography, specifically images of pre-pubescent boys, as well as drugs (his brief biography is appendix 8.18). He explained:

*“Some of the boys were ordered to take off their clothes. I couldn't understand this, I mean, what did that have to do with discipline or punishment? After that happened a few times I remember thinking that*

*this must be alright because you trust an adult... With the doctor, I mean you usually trust a doctor: he is there to act in your best interests. He wants you to get better. It was the normal check-up stuff, and towards the end, ah, well, you have to take off your clothes and then he started to play around with me, and then it was over and then I left. This happened a number of times over the years but my memory is pretty hazy. And then what happened next was that the kids started to do it to each other. The kids used to act out what they saw. I did talk to my Dad about what was happening but he didn't believe me. I can't believe that no one ever disclosed this. I think that the kids actually enjoyed it. I started to enjoy it myself after a while. Ah, I didn't feel guilty about it 'cos no one was getting hurt that I could understand. The guilt has started as an adult..."*

As with many of the previous accounts, Paul was sexually exploited by people he should have been able to trust. He was part of the sex ring for four years and eventually was involved in seducing other boys into the ring's practises. As an adult, he has re-enacted the abuse through his obsessive viewing of child pornography. The third male, Joe, was sexually abused by a school friend who denied it and thereafter bullied and humiliated him for a year after the incident was disclosed. The last male, Sagren, became involved with a gang and traded sexual favours for drugs, which he found very distasteful and about which he expressed much shame and remorse. He recalled:

*"I met those guys in the park. You know the 28's. I didn't have money for, ah, for dagga and things and then. I can say they raped me, not actually*

*raped me 'cos I agreed to it and stuff, but I agreed to have sex for money.*

*I needed money for the dagga”.*

Sagren was 15 when this happened and his experiences demonstrated that trauma frequently occurs as a consequence of a drug-involved lifestyle, which is in keeping with the findings in the literature (Driessen et al., 2008; C. Johnson et al., 2010; S. Johnson et al., 2010).

Research conducted internationally and in South Africa into the long term effects of child sexual abuse finds a stronger relationship between sex addiction and child sexual abuse amongst women than men, which was also the finding in this present study (Opitz et al., 2009; Wechsberg et al., 2009). Carnes (1991) found 63% of women and 39% of male sex addicts reported childhood sexual abuse. This present study also found that more women had been sexually abused than men. Four of these women reported being involved in prostitution which is also positively correlated to childhood sexual abuse (Wechsberg et al., 2009).

### **c. Other adverse childhood events**

All of the participants described various difficult family situations, ranging from domestic violence, to abandonment by caretakers and being placed in alternate care. The common thread through all of these events and experiences is betrayal by parents or other caretakers which, like the sexual abuse, undermined the growing child's ability to trust people, setting up the cascade of core beliefs that led to addiction as described by Carnes (2001, p. 152). The person sees him or herself as bad and unworthy and the outside world as unreliable. Addiction becomes a trusted and reliable way to meet those needs.

i. *Domestic violence*

Several participants described witnessing domestic violence in their family of origin and they recalled trying to protect their mother. These experiences are incorporated into the concept of developmental trauma and carrying all of the negative sequelae from this exposure (Schmid et al., 2013).

ii. *Death, divorce or abandonment by parents*

Abandonment by caretakers emerged as a major childhood issue during the interviews. It encompassed the death of the parent or caregiver (discussed above), divorce and subsequent lack of contact with one parent, and being placed in an institution. Most of the participants experienced one or more of these forms of abandonment. A quarter of the participants experienced the death of their parents or caregivers and most of the deaths had been sudden, many of them violent, for example, murder or a motor vehicle accident. None of the participants had received any form of grief counselling and seemed to have either ignored the loss or they had felt that they needed to comfort the adults and so pretended that they were coping with the loss. After Joe's mother died when he was eight, he took responsibility for his father's feelings and had to develop a happy façade to assist the family to cope with the sudden loss of his mother. Covering up, denying feelings and pretending are destructive ways of coping with loss and trauma. Trauma has a cumulative effect and a young age can potentiate the impact of trauma (Sar, 2010). Several of the participants experienced the divorce of their biological parents and reported that this had had a very negative effect upon them. A common theme in all of these accounts is

that of young children feeling abandoned by one or both parents. Anna battled to adjust to life in a new city after her parents' divorce and soon thereafter found acceptance in a drug-using peer group.

Tragically, Cassie gave birth to a baby at the age of 16 and was forced by her mother and the institution in which she was living to place her baby for adoption. She had hoped that this baby would enable her to start a happy family with her boyfriend and she felt tremendous guilt about abandoning this child (as she perceived it). Her mother signed consent for the child's adoption and Cassie was not prepared for the birth process which she had found terrifying. She stated that she "gave up trying to be a good girl" after she was forced to abandon her child and has battled to forgive her mother for this betrayal. The father of the child was unfaithful to Cassie and their relationship ended, which further compounded her sense of loss and abandonment. Cassie's drug use escalated rapidly from dagga to a range of other substances shortly after being forced to abandon her child.

### *iii. Institutionalisation*

Nearly one third of the participants were placed in institutions and/or foster care. Most reported negative experiences, including running away because they missed their mothers, sexual abuse by the staff at the institutions, feelings of rejection by the carers and feelings of abandonment towards their parents. Mandy said the following about her experiences:



*I blame the system a bit; actually I blame them a lot for the outcome of my life, because when you're that small, your choice is not really based on intellectual: I need to study, if I do this, this will happen. Your needs are, you need to be with your parents, to be, you don't need to be abandoned.*

Mandy's reflections upon her years in care were echoed by Sagren, Martin, Paul and Cassie who all expressed sadness and anger at the loss of contact with their parents (usually their mothers) and most of them developed severe behavioural problems that compounded their feelings of rejection as the institutions implemented progressively harsher measures to control their behaviour.

In summary, the majority of the participants described some degree of family pathology according to Olson's (1993) Circumplex Model. Their families did not provide them with good role models and a secure sense that they were loved and that home was a safe and accepting place. Bradshaw (2005, p. 50) states that "our families are where we first learn about ourselves. Our core identity comes first from the mirroring eyes of our primary caretakers." If the family of origin is dysfunctional, then it is likely that the child will develop a core belief that they are not worthy: the first of the four core beliefs in addiction as described above (Carnes, 2008). In addition to the family dysfunction experienced, many of the participants had been exposed to trauma in the form of sexual or physical abuse or other adverse developmental experiences. Women are more likely than men to begin using drugs to cope with stress and trauma (Becker et al., 2012), an assertion which was echoed by the

experiences of the women in this study. Research finds that men are more likely to be exposed to traumatic events after they begin using drugs (S Johnson et al., 2010). All of the men who participated in the study reported traumatic events post their drug débuts, such as assaults and rape, but several had also experienced adverse childhood events. Exposure to trauma in adulthood will now be described.

### **6.3.2 Experiences of trauma in adulthood**

All of the participants reported incidents of trauma as adults. The traumatic experiences reported ranged from rape and sexual assault, intimate partner violence, mugging, assaults by family members, criminals and the South African Police Services and assaults in prison. A few of the participants had been involved in criminal activities such as robbing and mugging people, housebreaking and gang-related assaults. Most of the female participants said that they had been raped, usually on multiple occasions and they generally described the rapes in a matter of fact and emotionless way which suggested some degree of dissociation. Kelsey stated:

*I've been raped a couple of times, ah, rape tends to love me! I don't know why. It's been an on-going thing with me throughout my life! Gee, I have been raped many times like when I have been high at the clubs; like you're so drunk that you don't know what it going on, you're out of it. I've been raped by boyfriends (shrugs) it happens, this kind of thing happens...*

Kelsey's account showed a high degree of dissociation from her experiences and also expressed her sense of powerlessness to stop these attacks from happening due to her heavy

use of alcohol and drugs over which she had also lost control. Other women reported being abducted and raped when out buying drugs. Joe reported that he had been gang raped when on holiday abroad and had had his drink “spiked”. None of these participants reported the rapes to the police. They listed several reasons: distrust of the police, a feeling that it was their fault because they had placed themselves in a risky situation, and apathy.

Many the women reported intimate partner violence in their relationships. Mandy recalled:

*Anyway, Jacobus was very controlling, very abusive, and in a short time he was treating me the same way that everyone else has always treated me in my life. He tried to kill me several times, he was very violent. He would always come with the sweet talk afterwards. One day I'd had enough and I sold him out to the cops. He had murdered a guy and when he came home he asked me to wash the clothes that were covered in blood...*

Mandy had had several long term relationships in which she had been exploited by her partners and she had experienced great difficulty in leaving these men, in keeping with the phenomenon of trauma bonding, one of the relationship addictions (Carnes, 2008).

The men in general reported different types of trauma. Sam, 22, was shot in the face in a ‘misfire’ at a shebeen. He had required extensive facial reconstruction surgery to repair the damage, but his face, sadly, remained very disfigured. Tony reported that he had done many “terrible things” whilst working as a gangster, and that he had suffered nightmares for a while about what he had done. Half of the men had been arrested and had spent some time in

prison awaiting trial, and all had found this a very frightening experience. Martin reported multiple arrests for crimes he had committed and he had found both his criminal activities and the subsequent time in prison very frightening:

*I tried committing suicide twice in 2009, 2010. I was arrested on three counts of housebreaking. The first time was in the police station. I tried hanging myself but the rope from my shoe laces broke. I was by myself in the cell so no one knew. The other time I put Vim in my food, ah, I got bad stomach cramps so they rushed me to the hospital. I was dehydrated and they gave me a drip.*

Driessen et al. (2008) note that their research into the relationship between trauma, as expressed as PTSD, and substance abuse confirmed previous studies which found that people with substance use disorders (SUDs) report a higher rate of PTSD and exposure to traumatic events than people who are not addicted to substances. Women who used alcohol and cocaine (dual substance dependence) are most at risk for trauma exposure and PTSD than women with one or no drug of abuse (C. Johnson et al., 2010). All of the women in my study reported a history of poly-substance abuse. The women who reported several or prolonged trauma exposures in this study used, on average, seven different substances. Women with substance dependence report more exposure to trauma than men (Becker et al., 2012) which was confirmed in this study. Kingston and Raghavan (2009, p. 67) conclude that exposure to trauma is frequently the *consequence* of substance abuse. They note that the early use of substances has negative effects upon the person through increased risk taking behaviour, poor judgement and the likelihood that the person is socialising with peers who are also

delinquent. This finding was confirmed in this study where half of the men had been imprisoned due to criminal acts, which were often committed to obtain money for drugs. Thus, their exposure to traumatic events had been precipitated through their use of drugs.

Many of the participants seemed to have features of PTSD, especially nightmares, hypervigilance and avoidance of situations that reminded them of traumas, such as being in prison. However, only one of the 25 participants had been formally diagnosed with PTSD and 4% in the general survey. I believe that this is an under-diagnosis of the condition. A possible explanation of this is that the majority had never undergone any formal psychiatric evaluation where such a diagnosis could have been made. The research is also clear that once traumatised, a person is more vulnerable to being further traumatised, either by the same type of trauma, or different experiences that threatens their integrity (Carnes, 2008). One study noted that women experienced more traumas in childhood, but there was not a significant sex difference for trauma in adulthood (C. Johnson et al., 2010).

I would concur with the existing literature that trauma plays a complex role in addiction. Many of the participants in the in-depth interviews had been exposed to trauma prior to their drug début. However, many were also exposed to, or continued to be exposed to traumatic or stressful events as part of their lifestyle that developed with their different addictions. It is now time to examine in more detail the participants' addiction experiences and how their different addictions combined to produce a complex package of addictions, which is the focus of the following chapters.

## **6.4 SUBSTANCES**

The literature lists different rewards experienced in addiction which “hijack” the brain’s pleasure centre (McCauley, 2009). Carnes’ (2008) list is the most comprehensive, but there is concurrence amongst researchers that the initial effects of the addictive behaviours or substance use are highly rewarding (Becker et al., 2012; Milkman & Sunderwirth, 1987; Sussman et al., 2011) and this reward is so reinforcing that the substance or behaviour, over time, becomes a priority. This characteristic of addiction is known as salience (Griffiths, 2005). The experiences described by the participants showed very clearly how the initial effects of the drugs were highly rewarding and this led to other features of addiction, such as mood modification, tolerance and withdrawal (Griffiths, 2005).

All of the participants interviewed in phase three had histories of poly-substance use and the number of substances abused ranged from two to ten, with an average of five. This is slightly higher than in the general survey, where 86% of the sample used more than one drug and a quarter of the participants reported using three different drugs. There was a great variety in the length of time that the participants in the in-depth interviews had been using drugs, which ranged from one and a half years (Sipho, whose sex addiction had developed several years previously) to 37 years (Tony, who began smoking dagga at the age of nine). Many of the participants described feelings of intense pleasure when they began using drugs. Some described how the drugs made them feel powerful, intelligent and confident. Others described how drugs relaxed them and helped them to forget their problems. They were all able to identify for themselves when they crossed the line from heavy use to addiction and described the defence mechanisms they had used to hide the addiction from themselves and others.

### **6.4.1 Drug debut and effects**

Most of the participants began using drugs in adolescence. It is important to understand that substances and behaviour alter the brain's chemistry and functioning, and the adolescent brain is particularly vulnerable to such modification, as was discussed in Chapter 2. The participants reported a variety of experiences which they had found highly rewarding, as described above. Several of the participants described how they began using alcohol, dagga, or inhalants whilst at school with their peer group, for the fun and excitement of doing something they saw as fun and naughty. This was also the time when many of them began gambling, becoming sexually active and staying away from home. It was noted with all of the participants that the addictions often shared a common developmental history and path. In discussing one addiction, in this case, substances, the presence of other addictions, such as sex, gambling, pathological relationships and core feeling states were already developing alongside the more easily identified problem of drug use. Common themes in early drug use emerged from the interviews held with the participants, namely euphoria, numbing and fantasy as initial rewards of drug taking (Carnes, 2008; Milkman & Sunderwirth, 1987).

#### **a. Euphoria**

Ben's experiences are similar to many other participants. He found his drug use very pleasurable and enjoyed the feelings of increased confidence that the drugs gave him. The first drug he used was Ecstasy when he was 13 years of age. He recalls:

*It exploded into my life like an atomic bomb! When I was under the influence of that stuff I was exactly who I wanted to be and what I wanted to feel like and it was almost as if my IQ went up 20 points 'cos I could*

*associate with older people and, um, not much older, um, only about two or three years older. Ja, then we started smoking weed, we started drinking, um, by the time I was 14 we started using cocaine.*

Ben found that drugs increased his confidence levels and made it easier for him to socialise with his peers, most of whom were older than he was. It also increased his acceptance by the drug using peer group which became increasingly important in his life. The euphoria described by Ben was echoed by Sipho and Kelsey who also experienced drugs initially as being intensely pleasurable. Sipho described discovering that dagga gave him an intense “tickling” sensation which he enjoyed. He began using Whoonga a year later and found its effects more intense. Kelsey began using alcohol at the age of 16 and her account demonstrated that rewards often combine to produce a more potently reinforcing experience. She recalled:

*Alcohol at 16, ah, it was fun! It was like a whole new world for me! And that started a whole cycle of, ah (hesitates) because of my hurt and stuff, to laugh was a brand new thing! To actually be able to laugh!! It made me funny and made my friends laugh and I thought ‘right, I’m a funny chick when I’m on weed’. So I did it more and more!*

Kelsey found that drugs helped her to forget her trauma, they made her feel happy and, like Ben, made socialising with her peer group more pleasurable and increased her sense of being accepted, which was in stark contrast to her poor relationships with her family where she felt that she was “the black sheep”.



## **b. Numbing**

In this study more women reported experiences of childhood and adult trauma than men, a pattern noted by Becker et al. (2012). There was also a trend that most of the women began using drugs to numb their feelings, however, this was also true for several of the men, especially those who had reported sexual abuse and loss of attachment figures, such as Paul, Joe, Martin and Peter. All four of these men had lost parents and Paul and Martin had suffered extensive sexual abuse as children. They explained that using drugs made them forget about their problems and helped them to escape from reality and numb their feelings. Mandy had experienced multiple childhood traumas. She began prostituting at the age of 17 and began drugging shortly thereafter to cope with her distaste for prostitution. She talked about her experiences of using different drugs. Mandy found the most enjoyable and potent effects of the drugs to be the numbing and fantasy rewards (Carnes, 2008; Milkman & Sunderwirth, 1987) and, as with Kelsey's experience, the drug use held two rewards for Mandy, as she explained:

*The next drug was acid and I loved acid. That was from 1995 up till 2007.*

*It's not a drug you can take every day; I loved the feeling of being here but not being here. Because in that alternative world, everything is amusing, just different...Smoking it (heroin) was a whole different thing: it makes you feel nice, almost the same as Mandrax, but it tastes better than Mandrax it puts you in that warm state where you just want to sleep.*

Mandy began using drugs to help her dissociate from reality and her intrusive memories of sexual abuse. The drugs not only removed her from her unpalatable reality but they also

enabled her to feel calm and relaxed. Her experiences were echoed by many of the participants, where their drug use produced more than one reward with numbing and fantasy frequently listed together.

### **c. Fantasy**

Paul had also experienced multiple childhood traumas. He used drugs for the fantasy and numbing rewards (and he obtained the same rewards through his addiction to adult and child pornography). When under the influence of drugs he could accept his natural introversion and he felt at peace with himself. He talked about his drug debut as follows:

*It was fun at the beginning to start using and everyone said it was cool.*

*I've always been distant, I don't do it on purpose; it's just my nature. The drugs seemed to help me relax but made me more introverted, isolating myself. I prefer drugs that have a mind altering effect or calming: I was very fond of Mandrax.*

None of the participants described using drugs for the deprivation effects, but, as will be seen with process addictions, food and exercise were used to obtain that mood altering reward.

Most participants described families that had failed to nurture them adequately, which increased their vulnerability to look for something to make them feel better. Carnes (2008) contends that the addict comes to rely upon and trusts the addiction to provide comfort, because the family is unable to or cannot be relied upon to meet their needs. This experience was reported by all of the participants in this study, many of whom came from profoundly

dysfunctional homes. Erikson (2009) argues that the drugs interact with the person's unique constitution and this result determines the selection of the drug of choice, or, more accurately, of "no choice" (McCauley, 2009).

#### **6.4.2 Crossing the line into addiction**

The biopsychosocial model provided a helpful framework with which to explore with the participants their experiences of the development of addiction (Derevensky, 2012). It drew attention to the interlocking elements, from physical changes, emotional and cognitive alterations experienced and social problems that evolved during the participants' escalating drug use. Many participants stated that they realised that they had a problem fairly soon after they began using drugs, but denied this reality to themselves and others, due to the potent rewards initially experienced.

Factors that alerted them to this problem were when they developed increasing tolerance for the drugs, which happened when they began using alcohol and drugs more frequently, or needing greater amounts of the drug to obtain the same effect and using a greater variety of substances (physical and psychological effects). Experiencing physical withdrawal from drugs, particularly heroin or Whoonga, or recovering from stimulant use was often a wake-up call that shattered the illusion that they could control their use of drugs. Joe described his spiraling drug use and the despair that he felt as he found his drug use getting out of control. It began to affect his productivity at work and he also became very aware of a widening gap between his friends, who could use drugs socially, in contrast to himself; drugs had become

his priority and led to increasing social isolation. His experiences highlighted the social dimensions of his developing addiction to cocaine:

*So there was that separation that a lot of my friends, who still use cocaine, are still able to do. They still do cocaine on the weekend, but they still are able keep clean during the week. But that wasn't the case for me. Soon I was doing it once during the week as well and that meant that the next say at work was, ah, torture! I'd be at work, totally beside myself, or just phone in sick.*

Joe expressed despair and anger at his inability to control his intake of drugs, and envy that his friends could use drugs in a social and controlled manner. Many of the participants believed that they crossed over to addiction when they began using a particular drug. Their perception was that prior to using that drug they had “kept things together”, although their perceptions may have been influenced by defence mechanisms, such as denial, minimisation and rationalisation which are common in addiction (Twerski, 1997). Cassie experienced a complete loss of ability to manage or control her life, which encompassed psychological and social dimensions of addiction, after she began using crack. She explained when she realised that she had become an addict:

*I'd say the last 12 years when I started smoking crack. Because before that, all my years of using Mandrax and other stuff, I managed my life! I used Wellcanol and heroin: most of my friends were on that, but I never got hooked on that. If I couldn't get anything else, I'd go to them and get a shot. But I didn't like needles. Before the crack I always had my own flat, my own furniture.*

Cassie described how her life spiralled out of control and also reflected upon her feelings of despair, a common theme amongst the participants. Lwazi had a similar experience with Whoonga. He believed that prior to using that drug his substance use had been under control. He recalled how his relationship with his family deteriorated because he began stealing from them. Many of the participants described conflict with family over their drug use. Griffiths (2005) notes that conflict is a characteristic of addiction and that conflict can occur within interpersonal relationships, as described by Lwazi, or internally, as described by Joe. Lwazi recalled:

*My family stop trusting me. If I ask them for money it was too hard for them to give me, ah, this was four years back, when I started using Whoonga. The only drug that gave me problems was Whoonga. If I'm gonna smoke today, then if I don't have money to smoke the next day then I have problems like a raw stomach, my back is paining, runny nose. And I was stealing, stealing: from my house, outside, anywhere! I steal [sic] from the shops, shoplifting just to get something small that I could sell to get money for Whoonga.*

Lwazi's experiences of crossing over into addiction illustrated the multi-faceted impact, ranging from physical withdrawal, intense craving and antisocial behaviours that he engaged in to obtain money for drugs. All of the participants who reported using Whoonga described the intense discomfort of withdrawal from it, and how this had driven them to commit criminal acts, prostitute or gamble to get money to continue using Whoonga.

However, the addiction story does not end here. Alongside the substance use, sometimes preceding its onset, were other addictive behaviours, including sex and gambling. Most of the participants in this study had not seen these other behaviours as problematic or as an addiction. Some had understood their sexual behaviour and gambling as part of their masculine identity as Raj, aged 50, stated: “I knew that the drugs were a problem, I knew that I couldn’t stay without it. I thought that I’m just a normal man with the other two things...” Kelsey was surprised when she tested positive for sex addiction on the R-SAST used in the survey phase of the study. It emerged during the in-depth interview that she had started acting out sexually before she began using drugs and the two ignited to produce overwhelming patterns of powerlessness and unmanageability in her life. She explained:

*I didn’t think that I had a problem until I did the test. And then I did the test and I thought ‘Oh boy!’ I’ve had a thing with sex since I was young. It’s quite, ah, I used to think about sex and dream about it since I was very young, ah, every night since I was very young. It’s been a constant thing and it has come first in my life.*

Kelsey and her family had focused upon her drug use and had attributed all of her behaviour to this more socially acceptable addiction. She acknowledged during the interview that her sexual behaviour and obsession had preceded her drug debut and that the drug use had reduced her inhibitions and enabled her to act out sexually as well as putting her at risk for rape.

It emerged during the interviews that, for many of the participants, the other (usually process) addictions were the primary addiction but they had not perceived their sexual, gambling, or other behaviours (such as exercising or spending money) as a problem. None of the three centres where I conducted my research utilised formal assessments into other addictions, which may have contributed to them remaining undetected. The following chapter will explore the participants' experiences of the other three categories of addiction: process, relationship and core feeling state (Carnes 2008).

## **6.5 CHAPTER SUMMARY**

This chapter began with presenting a brief summary of the 25 in-patients who had participated in the in-depth interviews. Thematic analysis was used to explore the participants' experiences in their family of origin and Olson's (1993) Circumplex Model of Family functioning was utilised as a guide for this exploration. The participants' experiences of trauma in both childhood and adulthood were examined and it emerged clearly that most of the participants had experienced both family pathology and trauma in their histories, meeting one of the aims and objectives of the research. These findings concurred with existing literature which pointed to the rôle played by families of origin and trauma in the initiation of the addictive process. The participants' experiences of substance use were then discussed. The next chapter continues with this analysis and focuses upon the remaining three categories of addictions (Carnes, 2008) particularly sex and gambling, to establish if the participants experienced multiple addictions, which was a primary aim of this study.

## **CHAPTER 7**

### **DATA ANALYSIS: MULTIPLE ADDICTIONS**

#### **7.1 INTRODUCTION**

Chapter 6 examined important issues regarding the causes of addiction and specifically examined participants' perceptions of their family of origin and the traumas experienced as both a child and as an adult, in keeping with the second objective of this study. These two factors are seen as key in the development of addiction (Bradshaw, 2005; Sussman et al., 2008). Chapter 6 also began the exploration of the participants' addictions through a discussion on their use of substances, which was the reason for their admission for inpatient treatment. The biopsychosocial theoretical framework that guided this study assisted in broadening the focus and understanding of the causation and the impact of addiction from the altered neurophysiology of the brain, to the perceived psychological benefits or rewards of the addiction, to the social aspects of addiction, in terms of peer groups, the family and the broader community (Shaffer et al., 2004). This framework created a mindfulness of the interplay between these levels as they combined to create the illness of addiction. In this chapter, I discuss the participants' perspectives on their gambling and sexual behaviours in addition to the other addictions as listed by Carnes (2008). The analysis examines how each addiction developed and manifested itself and examines the experiences of multiple addictions: one of the objectives of this research. This discussion will provide the context for Chapter 8 in which the interrelationship between the addictions will be explored and assessed as to whether AID is a valid model to explain the lived experience of addiction.



## **7.2 GAMBLING**

The general incidence of problem gambling amongst the survey participants was 23% scoring positive and a further 13% scoring in the 'at risk' category, using the PGSI (Appendix 5). This was a much higher incidence than the estimated incidence of problem gambling in the general South African population of between one and two percent (Bulwer, 2006). Participants who were selected for the in- depth interviews displayed higher rates of problem gambling than in the general survey as the majority, 14 out of the 25 participants, tested positive for problem gambling on the PGSI and a further six scored in the 'at risk' category, meaning that most of participants, 20 of the 25, displayed features of problem gambling. It emerged during the interviews that most had experienced their gambling debut during adolescence and almost all of them had a distinct preference for gambling in a specific manner for example, casinos, the horse totes, clubs, shebeens or "neighbourhood games" (Krish). Very few had more than one preferred mode of gambling; the only overlap was some people gambled at the totes in addition to another venue, either casinos or at neighbourhood games.

I engaged with the 20 participants about their gambling behaviour and then explored how it was linked to their other addictive behaviours. The biopsychosocial model guided this investigation and it emerged clearly that, as with the substance use, gambling had its origins and manifested its consequences in many areas of the participants' lives. Important factors emerged in understanding the development of a gambling addiction, and included the influences of the parents, the schools and the general culture of the participants, all of which encouraged gambling. Gambling impacted negatively in fuelling substance use and criminal

activity, causing conflict in relationships and causing despair and unmanageability in the participants' lives.

### **7.2.1 Gambling debut and its effects**

Three of the gamblers reported having a parent with a gambling addiction and each had accompanied their parents to the casinos. Sipho was aware that his mother was addicted to gambling and described how his father was powerless to stop her and he “allowed” his wife to disappear for an entire weekend to the casino. She liked to take her son with her to the casinos and Sipho had gambled and lost a lot of money that way. Pria’s father took her to the casino to “get her mind off the drugs” and she said that both of her parents are “soaked in it”, referring to gambling. Tony stated that gambling is part of his culture. He grew up with gambling and saw it as a normal part of life. He stated:

*Well, (cultural group) are all in gambling, they all gamble, that's their lives! How they play cards, or at the casino, or on the horses, it's how you grow up. You play cards, you play for money, casinos, you have to be a bit older, but I was very mature for my age, so if I walked in nobody asked how old I was. I went with my uncle, my father...*

More than half of the in-depth interview participants who had tested positive for gambling did not realise that they had a gambling problem. Six of the participants, all Black Africans, reported that they had started gambling at school and that the gambling games took place during break times and it was a normal part of school life for them. Thabo explained that he had started playing “spin the bottle” in primary school, and this had escalated when he got to

high school and how, then, most break times were spent playing “big games”. All of these six participants gambled at school to win money to buy food or drugs. The teachers never intervened to stop the gambling games and, according to those participants, the school management did not see the gambling as a problem, in contrast to action taken against learners who smoked cigarettes or used other substances at school, who were severely punished, if caught. Those who began gambling at school continued to do so after leaving school and began frequenting informal places close to where they lived.

Several of the participants gambled at their local neighbourhood venue, often a shebeen. If they lost or needed money, they robbed their fellow patrons who were drunk and unable to defend themselves. They bought drugs and gambled at shebeens and had the thrill and risk of stealing from others in the same setting (core feeling state addictions, to be discussed in 7.7). The participants’ accounts showed clearly that their addictions were interlinked and were dependent upon one another to attain the desired mood-altering effect. Addiction interaction was discernable in their accounts.

Andy, 34, blamed his gambling addiction upon his use of methamphetamine as he had previously found casinos to be boring. However, when under the influence of methamphetamine (which he called crystal meth) he found casinos to be totally entrancing and he and his fiancée soon developed a pattern of gambling and drug binges lasting several days. Andy, Thabo, Lloyd, Raj and Peter consumed drugs in the same venue where they gambled. This is known as fusion of the addictions and is a pattern of AID, which will be discussed in more detail in the following chapter. Andy explained:

*But when you're high on crystal meth, you are so wired, so high, you get bored. There's nowhere else you want to be. So I suggested to my fiancée one night that we go to the casino. We were like two children: it was like a funfair: bells and whistles. Crystal meth brought out my addiction to gambling.*

Andy's description accurately captures the powerful mood altering effect that gambling had upon him and his fiancée. He reflected that, in treatment, he craved and missed gambling more than the drugs and he was overwhelmed by how quickly he had developed this addiction. Many of the participants reported that they were introduced to gambling because it is commonplace in their neighbourhood. Martin recalled:

*I started gambling with the cards in the shacks. I was watching my friend gambling and saw how he won and I thought that it's easy to get money that way, let me try. And then I started gambling and I won.*

The literature is clear that gamblers are often "hooked" by an early win (Bulwer, 2006; Nelson et al., 2009; Hoffman, 2011) and this was Martin's experience. Many of the participants described boredom and the possibility of making money to fund their drug habits as a motive for gambling, which was cited as the most common reason by the male participants as the reason for beginning to gamble. Women are more likely to begin gambling to escape dysphoric states (Bulwer, 2006; Jamieson et al., 2011). Trauma, particularly in childhood, is also linked to the severity of gambling involvement (Pelzer et al., 2006). Most of the participants in the in-depth interviews reported a variety of childhood

trauma experiences, and many of them scored positive for problem gambling. However, not all participants with histories of severe childhood trauma presented with features of problem gambling. Mandy and Paul scored zero on the PGSI, which illustrates the point that each person's expression of addiction reflects their soul window, and they unconsciously choose an addiction that best helps them "access the unresolved" (Carnes, 2003, p. 312).

### **7.2.2 Gambling addiction**

The criteria for gambling disorder are similar to those for substance use disorders and they are both part of the addictive disorders category in DSM-5, as has been described in Chapter 3 (Hodgins et al., 2011; Wareham & Potenza, 2010). All twenty participants described negative consequences from their gambling. Losing money was seen as the worst aspect of gambling and most reported 'chasing losses' (Bulwer, 2006; Ladouceur, 2004). Those who tested positive for problem gambling talked about an increase in the amount of time and money spent gambling (tolerance) and many stole money to fund their gambling (legal problems have been removed in DSM-5) (APA, 2013). They also described loss of control over their gambling, and many were convinced that they had a system to 'beat the odds', which Ladouceur (2004) notes should be understood as a cognitive distortion. Nelson et al. (2009) argue that not all ten symptoms of pathological gambling, as listed in the DSM-IV-T-R, should be accorded equal weight and that 'chasing losses' together with preoccupation should be seen as gateway symptoms indicating the possibility of pathological gambling. They posit that two other symptoms, lying about gambling and loss of control over gambling are more accurate indicators of pathological gambling, both of which were experienced by the participants in this study. Presented below are descriptions of the several of the

participants' gambling addiction and the symptoms of pathological gambling that they experienced (DSM-IV-T-R, APA, 2000). This study was conducted prior to the publication of DSM-5 in which the symptoms of disordered gambling (as it is now known) were slightly altered (Denis et al., 2013).

John reported that he had committed illegal acts to fund gambling, and described his loss of control over his gambling and his failed efforts to stop. He described his gambling behaviour in the following way:

*... and then I gamble a lot and I lose, then I go rob people, ah, and then I say 'let me stop gambling!' I've lost a lot of money!*

John described a cycle in which he used the proceeds from robbery for gambling and to purchase drugs. He felt powerless to stop the gambling, despite suffering financial loss.

Jill illustrated other symptoms of problem and pathological gambling, viz. loss of control, chasing losses and tolerance (needing to place bigger bets to get the same level of excitement). She recalled:

*I'd always bet on the horses and sometimes I'd win good money! Maybe R4000, R5000 and I'd carry on, carry on punting and I'd walk out with nothing! I'd just want more, more, more then I'd end up with nothing! (shakes head).*

Jill also described feeling powerless over her urge to gamble and her despair when she lost all of her takings.

Lwazi also described loss of control and failed efforts to stop gambling. He recalled:

*Every time I got money, I go gambling. I try to make more and more money. If I got R100 maybe I try to make another R100, ah, and then you lose it all. That's when I realise that gambling, it's not good. I tried to stop but it's hard!*

A common experience with each of these three participants was their anger with themselves at being unable to control or stop their gambling addiction which was for them, as powerful as their dependence upon drugs. Raj described how his gambling impacted upon his relationship with his wife, how he lied about his income to enable him to fund three different addictions, namely, gambling, drugs and sex. The entire cycle will be discussed in more depth when I examine addiction interaction. He explained:

*I used to tell my wife I only got R1000, ah, it carried on for years and then eventually my wife phoned my brother to check. I went to banks and took out loans on false pretext. I still owe two banks money! I used that money to gamble...*

Raj's experiences were slightly different from the first three in that he had been formally employed as a truck driver and had been able to access bank loans, and had therefore incurred debt to fund his addictions. He also committed criminal acts to fund his addictions, such as carrying extra loads and selling the truck's spare tyre.

All of the Whoonga addicts used to see gambling as a way to make “fast cash” (Anna). Note that Anna scored five in the “at risk” category for problem gambling on the PGSI and, in concert with her drug addiction, gambling formed a potent part of her addictive patterns. She recalled:

*So I would go and play and if I win R150, then I just go and use the Whoonga. At times I did lose a lot of money, like if I've got 20 bucks, and I lose it, I'd go crazy, cos I lost that money. The gambling was exciting, I sometimes went back to win back more. I used to steal money to gamble. I didn't think that I had a problem with gambling, ah, if I had no customers to do hair, and I couldn't steal money from home, then I'd go gambling.*

Only six out of the 20 participants who tested in either the positive or “at risk” ranges for problem gambling had realised that they had a gambling disorder. None of these six who had acknowledged their gambling problem had ever received any treatment for it. For those who had received previous treatment for their substance dependence, none had ever been assessed or treated for a gambling addiction or had ever thought to talk about their gambling patterns when in treatment. It was concerning to note that many of the participants and their families saw gambling as a safe alternative to their drug use and an appropriate substitute. This discussion shows clearly, however, that many of the participants experienced the two key features of addiction in their gambling behaviour, viz. powerlessness and unmanageability (Carnes, 2008). I will now examine the participants' experiences of sexual compulsivity, the second addiction that was screened in the survey phase of the research.



### **7.3 SEX ADDICTION**

In the general survey, 40% of the 123 participants tested positive on the R-SAST for sex addiction and 30% of them tested positive for internet sex addiction. With the exception of two males, the participants who were positive for internet sex addiction were also positive for sex addiction. Twenty three of the 25 participants in the in-depth interviews phase scored positive for sex addiction and one of the participants, Andy, scored at the cut off point for sex addiction in addition to scoring positive for internet sex addiction. It was important to note that only one participant, Pria, presented with a very low score on the R-SAST, meaning that sex addiction featured strongly in the experiences of the majority of the participants.

The themes that emerged from discussing problematic sexual behaviour with the participants are discussed below. It was evident in all of the accounts that the sexual behaviour did not exist in isolation from other addictions. The presence of drug use, gambling, disordered eating and dysfunctional relationships were part of the fabric into which the sex addiction was woven to create the participants' unique expressions of addiction. The findings confirm that addiction exists in a powerful way to assist the addict heal childhood wounds, albeit in a destructive way (Bradshaw, 2005).

#### **7.3.1 Selling sex**

This type of sex addiction is referred to as “trading sex” (Carnes, 1991, p. 43; Carnes et al., 2007, p. 91). Four of the females and two of the males had been involved in prostitution. Three of the female participants had worked as prostitutes for many years. It must be noted that they preferred the word ‘prostitute’ over the term ‘commercial sex worker’ which is the

reason I have used this word when writing up the research. Cassie described how she began trading sex as a young child to get sweets which she used to keep in a cupboard and shared with her siblings. There was often no food in the house and no money for luxuries such as sweets, so Cassie began “going with” men. She explained:

*When I was five, I used to go with men in the street who stopped their cars and they would give me sweets and toys. I would get into the car and play with them and so on. I did this because we were so poor: there was nothing in the house! And there were men in the car. [Name of town] were full of them, ah, and sitting here now, I can remember the cars' colours and everything! There was one guy on a bicycle, and he always had sweets. I was always running around and they used to call me the 'Duiwel's kind' (the Devil's child) because I was running everywhere... (laughs)*

Cassie was very clear that she began selling sex at a young age because it was financially rewarding. She and her older brothers were already involved in incestuous relationships and she had begun to masturbate compulsively as a way of soothing herself. During the interview, Cassie reflected upon the emotional damage caused by her years prostituting, and her description of her lifestyle makes it clear that she saw the other addictions as being inevitable. They were needed to cope with the long term damage that prostitution caused to her spiritual and emotional health. She said:

*I believe prostitution is an addiction. Any working woman going into prostitution has to use drugs: wine, smoking because you can't handle the*

*guilt! Going with other men and you've got a husband at home, I mean it's so hard (pauses) once you have that money you can't stop. The guilt and shame eats you up so much that you go to another vice: you drink, take drugs or you become a gambler...*

Cassie spoke very clearly about how her years of prostituting had damaged her and her capacity for authentic relationships. Talking about her attitude towards sex and her sexuality, Cassie stated “I know that is a problem, even now it is a problem. It is now a spiritual thing. That caused problems in my relationships. I wouldn't want to have sex unless I was being paid in some way.” Cassie associated giving sex in exchange for favours from a very young age. She recalled that there was sibling incest from about the age of five, and her stepfather began molesting her when she was about nine. Cassie exchanged sex for sweets and later for money, drugs and protection from her gangster partners.

In a similar vein, Mandy believed that her attitude towards being a prostitute was formed by years of being sexually abused by her father, step father, her brother and his friends. She turned the powerlessness that she had experienced from being molested by her family into bargaining with her brother for him to give her money in exchange for sex. Her brother began offering her money to have sex with him when she was 14 years of age. She describes the impact that this shift had upon her development: “I thought ‘he's going to do it anyway, I might as well get paid for it!’ And then it shifted; because I got some power in a warped sense. I felt I was in control: it wasn't just taken”. Mandy, like Cassie, began to use her sexuality as a way of gaining some control over her environment and both rationalized their

exploitation at the hands of others by getting material compensation for their sexual services. At 17, after completing school, Mandy returned to her mother's home and there was a shortage of money. She believed that she did not have the skills to obtain formal employment and answered an advert in the paper to join an escort agency. She described how her drug and alcohol abuse enabled her to prostitute and they quickly became part of her lifestyle. Mandy was enticed into prostitution by the high earnings and the poverty at home. Her drug use helped her to block out her distaste for prostitution and the two patterns were soon inseparable.

*I thought to myself 'I can't sleep with people for a living. I don't even like people! I don't want strangers touching me, rubbing me and "gaaning aan"' (getting off)'. I gave the R750 to my Mom and the day before there had been no food in the house. All she had was dry bread and black coffee. She was so happy with the money... [and I] mean, who says you have to be sober to do your work?? I mean, the drunker I am the better I am!!*

Both Cassie and Mandy believed that prostitution was inextricably linked with drug use. Cassie, Mandy and Jill lived with and worked with gangsters, a lifestyle that involved prostitution and selling drugs. All had experienced incest and they believed that they were doomed to be sexually exploited, so they rationalised that they should benefit from the situation as best they could. Anna stated that she traded sex for drugs and money, as did Sagren and Peter, but they did not work formally in the prostitution sector. One of the unconscious motivations for prostitution could be trauma arousal: the initial child sexual

abuse caused fear and a state of heightened arousal and sex, especially high risk sex, becomes associated with these feelings (Carnes, 2008). Cassie and Mandy both specialised in sado-masochistic sexual practices when prostituting. Trauma repetition is also evident here, in that the participants continued to experience sexual exploitation which had started in their childhoods (Carnes, 2008).

### **7.3.2 Buying Sex**

Carnes et al. (2007, p. 93) refer to this pattern as “paying for sex”. Six male participants reported this pattern. Tony had lived with and pimped for prostitutes for ten years and his experiences show how his sex and drug addictions were closely related. In fact, he said that he stopped gambling when he began living with the prostitutes, as he needed his “gambling money” for drugs when his drug habit had escalated. He recalls:

*I used to always go out with the prostitutes, I used to hang around with the prostitutes, I used to have sex with them. I pimped for them for a while. My first wife was aware about the prostitutes, but she didn't know exactly about them. Ah, it lasted a good few years, ah, ten years, easily. My drug use escalated then, it was very bad. When you're with the prostitutes, they want drugs, you want drugs, ah, it all comes. Ah, it was crack, cocaine, CAT, ecstasy.*

Tony's experiences demonstrate the escalation of his addictions and how each reinforced and fuelled the others. He began by using the services of prostitutes and this progressed to his

with living with them, acting as their pimp, dealing and using drugs, in addition to the risk and excitement of being involved in a criminal syndicate.

Some of the men expressed guilt and ambivalence about buying sex from prostitutes. This was either related to feeling guilty about being unfaithful to their partner, or from a general moral sense that it is wrong to go to prostitutes. Sam recalled:

*I think about sex all the time and I have lots of sex with different girls.*

*I've tried to stop cheating on my girlfriend, but I can't stop! I go to*

*Durban to buy some girls: a lot of crazy things. I feel bad afterwards.*

Sam expressed sadness and frustration over his inability to stop going to prostitutes. It emerged during the interview process that he experienced several different types of sex addiction as described in Chapter 3 (Carnes et al., 2007) viz. paying for sex (prostitutes and buying pornography); seductive role sex (seducing different girls whom he met online); voyeurism (compulsive viewing of pornography on his cell phone and home personal computer) and fantasy sex (compulsive masturbation to pornography). Most of this sexual behaviour was enhanced by his use of Whoonga.

Similarly, Martin's account shows clearly the relationship between his drug taking and use of prostitutes. The two are intertwined as illustrated in his explanation:

*I always think about sex. I think I've got a problem. When I've got money I*

*go to prostitutes. I know it's wrong, but (hesitates) whenever I've got*

*enough money, I buy my drugs then I go to the prostitutes in town.*

Martin also expressed feelings of powerlessness and shame in relation to his sexual behaviour, a theme that emerged very clearly amongst the participants in this study.

### **7.3.3 Compulsive seduction of partners**

All of the women who had not prostituted over a significant period of time described this pattern of sex addiction. The three women who had been raped (without incest) Anna, Ayesha and Kelsey felt confused that they now compulsively seduced men when they felt that a normal reaction to rape should have been an aversion to sex. Carnes (1997, 2008) explains this phenomenon as part of a complex range of reactions to trauma which involve their being aroused by and repeating the trauma. The rapes re-created the high state of physiological and psychological arousal that existed in the original childhood sexual trauma and the trauma was re-enacted through their sexual addiction. Kelsey described her experiences:

*With me it (hesitates) when you've been raped you normally feel you don't want sex, you don't want to be touched. With me, it was like a completely different thing, like the opposite. I just went sex mad and I had sex at work with my boss, Don, this guy, that guy, all the time! I would get sex wherever I could. I'd seduce these guys. At school, with anyone I could.*

Kelsey's sexual acting out caused her to lose her employment, her relationship with her boyfriend and alienated her from her family. Her experiences demonstrated the characteristic of addiction whereby the addict continues with the behaviour in the face of negative consequences.

It was interesting to note that most of the male participants met potential partners via both internet chat rooms as well as in person, for example at clubs and shopping malls. By contrast, only one female, Anna, met male partners via the internet, whilst the rest of the women said that they met men at clubs, at work or in their neighbourhood. Sipho talked about how he had met multiple partners online, as well as using the internet to view pornography. He talked about his sexual behaviour:

*Through my cellphone, my laptop. I buy data bundles. I visit gay websites: 'gay erotica'. I Google gay porn, ah, I sometimes masturbate to the porn (laughs, embarrassed). I was spending too much time looking at porn, chatting on line. I've met lots of guys from the chat sites. We hook up, uh, very many. I am so fast on line.*

Sipho was living a double life which he had found exciting. He rebelled against his parents who had rejected of his homosexuality and was compulsively drawn to the intrigue and secrecy of “hooking up” with partners online. It was clear that many of the participants demonstrated a variety of sexual behaviours from the ten different categories of sex addiction (Carnes et al., 2007). In Sipho’s case, there was fantasy sex, voyeurism and seductive role sex.

#### **7.3.4 “I can’t say no to sex”**

This was a concern articulated only by the women and all who described this issue had had prior experiences of rape. This concern existed in addition to compulsively seducing sex partners. Not being able to say no to sex happened when they were not planning to seduce



anyone but, if a person wanted to have sex with them, they felt unable refuse the advances made. Kelsey described rape as ‘a friend’ and Jill expressed a profound sense of powerlessness over her bodily integrity:

*I’ve tried to stop having sex before but I don’t know how to say no. I can say no, but after I’ve said no twice, ah, and you carry on and you don’t accept my no then I don’t know what to do. I just give in ‘cos I don’t know what else to do. I can either get aggressive and it gets ugly, or I just submit and let the situation happen. It depends how the situation is...*

Jill had run away from home at a young age and had not developed appropriate social skills. She expressed profound feelings of powerlessness and felt that her constant pattern of being sexually exploited was inevitable. Ayesha and Jill were both vulnerable to sexual exploitation due to being unemployed and homeless. Ayesha described a recent experience where she was staying with a friend and her friend’s brother-in-law came to the house and raped her:

*It was just me and him at home, and he forced himself on me. I told my mother and she said (starts crying) because of my history with boys, I must have wanted it. I told my mother and she blamed me, it must have been me that wanted it, it’s not his fault.*

Ayesha’s experiences touched on societal attitudes towards women and myths around rape. Ayesha was blamed for being raped because she had a history of having had multiple sexual partners. Similarly, when Jill wanted to report her rape and abduction, the police reportedly refused to take her statement because she was a known prostitute. A lot of the women

expressed a profound sense of sadness, ambivalence and powerlessness regarding their sexuality. Half of them prostituted and saw it as a way of gaining power and control over others, as discussed above.

### **7.3.5 Infidelity to partner**

Most of the participants had a partner or had been in a relationship when they had been behaving in a sexually compulsive way. Most believed that their sexual behaviour was problematic, partly because it violated the trust that their partners had in them. For example, Krish said:

*I feel bad about all the different girls I slept with (pause). I chased girls for the fun and the pleasure of it. I used to fool a lot of girls, a lot of times, talk to them, especially when I'd been drinking. It gives you the courage to go up to them and chat to them. I'd meet them in town, the shops. I've done this to over 22 girls in a year. My girlfriend never found out about this, so I don't think she was hurt. I knew it was a problem and I did wrong thing to do but I couldn't stop.*

Krish found it fun and exhilarating to seduce different girls; he had no intention of beginning a relationship with any of them; for him his goal was seduction. Most of the participants who reported that they were unfaithful to their partners expressed guilt about this and had a sense that it was “not right”. However, as Krish expressed, they felt unable to control their urges to have a variety of affairs, and they expressed feelings of powerlessness over their sexual urges. Lwazi was unfaithful to his girlfriend but reported that he stopped meeting women

online and switched to using pornography after his girlfriend fell pregnant with his child. A few had the attitude that, as long as their partner did not know about their infidelities, it was acceptable. Martin said that what his girlfriend did not know about “would not hurt her”.

David’s pattern of sex addiction was compulsive viewing of pornography about which he expressed profound guilt because he is married. He rationalised that it was not “as bad as having an affair” but nevertheless felt that he was violating his marriage vows behaviour. The participants were able to compartmentalise their affairs and ensure that their partners did not know about their infidelities. Keeping secrets and aspects of the self hidden from others is an important part of addiction and needs to be addressed in treatment (Bradshaw, 2005).

### **7.3.6 Compulsive use of pornography**

Pornography was brought up as an issue by most of the men but only two of the eight women, one of whom was homosexual (Jill) and the other was bi-sexual (Kelsey). Different issues regarding pornography emerged during the interviews. Some participants, like David, viewed it as being unfaithful to their partners. All of the participants who viewed pornography reported compulsively masturbating to it and expressed guilt about this but felt powerless over their compulsion to watch it. Many of the respondents reported that their partners and other family members were very angry and disapproving towards them when they found their pornography collection, which was usually stored on their cell phones or personal computers. Paul spoke about his addiction to pornography and later in the interview admitted to his addiction to child pornography. His preference is for child pornography that shows children in the age range when he was sexually abused; boys of the ages from nine to thirteen. Carnes

(2003, p. 312) argues that pornography is so powerful because it is a vehicle that enables the person to “access the unresolved”. In viewing pornography ‘voluntarily’ as an adult, Paul is not being coerced into sexual activities, but is able to participate in it on his terms, a form of trauma arousal and trauma repetition. He explains:

*“Because of what happened to me in my childhood. I was too young to experience sex when I did and it got hardwired into my brain. Ever since then it’s been pushing me in that direction (pause). It’s what I knew! Almost like that moment in time was frozen. It’s like reliving that moment, getting the same feelings a whole mixture of feelings: the enjoyment you’re getting out of it, the forbidden part of it. I wouldn’t do it if I didn’t get something out of it.”*

Paul is receiving specialised treatment for this addiction and was the only participant who disclosed viewing pornography that is illegal. Most of the men reported watching adult heterosexual acts; the two homosexual males said that they watched adult gay male pornography and the gay and bisexual women said that they watched adult gay female pornography. All of the participants who watched pornography said that they did so to help them masturbate or relax, which are two rewards of addiction: numbing and fantasy (Carnes 2008; Milkman & Sunderwirth, 1987). None used pornography as a sex aid for their partners, although this was the context within which Joe had been introduced to pornography. Two of his partners owned extensive pornography collections which he described as “arsenals of gay porn” and Joe said that he initially was not interested in the pornography and

had felt slightly offended by it. He later developed an enjoyment for it and now sees it as a safe alternative to relationships.

### **7.3.7 Compulsive masturbation**

Half of the participants reported that this was a major problem for them and most of them expressed great shame about masturbation. All of the participants reported that they used masturbation to relax and comfort themselves: the numbing or soothing reward of addiction (Carnes, 2008; Milkman & Sunderwirth, 1987), as described above. Martin expressed his distress at not being able to stop masturbating, which for him was more shameful than his compulsive use of prostitutes. He described ongoing failure on efforts to stop this behaviour.

*I also got another problem, masturbating: I have to do it! I have to do it! I know it's wrong but I have to do it. I feel so bad afterwards, I know it's wrong (pause) it calms me down. I started when I was 16 and I can't stop. I keep getting these pictures in my head, ah, of me and a woman: I try and pray but I can't get these pictures out of my head. It's still in my mind, it's still in there.*

Martin had been sexualised at an early age through witnessing his mother's prostitution and being sexually abused by an uncle and he had started masturbating at a young age, before he had started to use drugs. This provided a reliable source of comfort for him, as opposed to his neglectful and dysfunctional family.

Andy, who scored just below the threshold for sex addiction, but scored positive for internet sexual addiction, reported that he had started masturbating to pornography when he began using methamphetamine which shut down his emotions to the extent that he felt he could not connect with his fiancée on any level. It also increased his libido, so masturbating to pornography was the only way that he could be sexual.

*I was so disconnected from her. I felt more comfortable with the porn, it wouldn't affect me. My fiancée found the porn on my phone and she confronted me. She felt very rejected by it and it caused a lot of turmoil in our relationship.*

Andy's experiences demonstrated the interconnection between the different addictions and that it is impossible to see them separately. Andy's use of methamphetamine was the spark that ignited both gambling and pornography addictions, as well as heightening his thrill for speculating in antiques. If, as a clinician, the focus is only on the drug use, one gets a very limited, one-dimensional view of the client's addiction with a resultant blinkered approach to treatment.

### **7.3.8 Sexual aversion**

Sexual aversion is classified as a disorder of sexual desire and is characterised by an extreme avoidance or aversion to sexual contact (Sadock et al., 2007). None of the participants expressed distaste for sexual activity, but a few expressed concerns that their drug use had made them less interested in sex and this had caused conflict in their relationships with their partners. This issue was raised by Daisy and Peter, both of whom used Whoonga. Peter said:

*Ja, with the Whoonga, I don't want to have sex! I'm not normal...it's been so long since I had a relationship with a woman, it's not normal. It's been 3 years. It's not normal.*

It was interesting to note that many of the participants who had used Whoonga reported that their libido increased when using this drug, and they blamed it for much of their sexual behaviour, such as hiring prostitutes and watching pornography. This demonstrates the point that each person's interaction with a drug or other addictive processes is unique and an individualised assessment is vital. Joe stated that he had not had a partner for some years and was not sexually involved with anyone due to the fear of being emotionally hurt. He said that his sex drive was very low and he masturbated to pornography occasionally, if he felt that the need to relax.

### **7.3.9 Exhibitionism**

The last theme raised by the participants was exhibitionism in the form of sending naked pictures of themselves to people whom they had met via chat rooms. Anna, Siphon and John reported trading nude pictures with people whom they had met online. In Anna's case, she received airtime in exchange for the photographs, but the thrill of sending the pictures was also intoxicating for her. John explained:

*Ja, there is one girl from Nkandla. I don't know her; I only met her on the cellphone. I think she's also a sex addict (laughs). She sends me pictures on the cellphone and I've sent her pictures (laughs, embarrassed). It is very easy on the cellphone. You meet lots of girls on the chat rooms. Once*

*they send you a picture you think 'no, she's ugly' so you pick another one,  
ah, I've met about 15 – 20 girls like that.*

Cassie described how she used to dress provocatively to gain attention from men, and how she participated in “wet T-shirt competitions” and female mud wrestling to achieve this aim. Joe talked about how he would dance in very skimpy outfits at gay clubs and enjoyed being admired as a “sex god” by the other patrons. This admiration helped fuel his eating disorder, exercise addiction and amphetamine abuse which he saw as essential to keep himself very slim and attractive. Carnes et al. (2007) emphasise that exhibitionism becomes a problem when the individual becomes fixated on being noticed with little intention of forming a relationship, or is noticed in a way that is inappropriate. The participants wanted to arouse the people with whom they interacted sexually, and generally had no intention of forming any relationship with their admirers.

As with gambling, many of the participants did not realise that their sexual behaviour was problematic. Some, especially the men, saw it as a normal expression of masculinity or having a healthy sex drive. More of the women displayed insight into the fact that they had issues with sex but had not seen it as an addiction. A possible reason for this gender difference was that the women identified more negative consequences from their sexual behaviour; rapes in particular and being involved in prostitution were more adverse and obvious signs of sexuality out of control. Only one man reported a rape and two reported a brief involvement in prostitution. The most adverse consequence experienced by the rest of the men was when their partners had found them watching pornography or found their



collection of pornography. A few people gained an understanding of their problematic sexual behaviour when completing the R-SAST and during the interview process.

Many of the participants did not see their sexual behaviour as an addiction. Denial and other defence mechanisms could have been responsible for this lack of insight in addition to the general societal disapproval and taboos which make sexual addiction even more difficult to admit to, as opposed to substances or gambling (Carnes, 2008). However, what emerged clearly during the interviews was a sense of powerlessness and bewilderment experienced regarding their sexual behaviour and this had, together with their other addictions, made the participants' lives chaotic and unmanageable.

This discussion has begun to address one of the research questions, namely, how the participants understood and experienced the interaction of their multiple addictions. In beginning to weave together the different strands of addiction and some of the participants' accounts of their lives, a picture is beginning to emerge that the substances, sex and gambling did not exist independently of one another. Below are descriptions of other process addictions identified by the participants and attention will be paid to how these other addictions formed part of the participants' unique experience of addiction.

#### **7.4 OTHER PROCESS ADDICTIONS**

Although this study formally assessed for sex and gambling addictions, two of the objectives of the research were to assess establish the prevalence of multiple addictions and to explore experiences of multiple addictions. It is clear from a review of the research that addictions

co-exist, with some addictions exhibiting stronger rates of co-occurrence than others, as was discussed in Chapter 3 (Sussman et al., 2011). Other process addictions researched in the literature and identified by the participants in this study related to food/eating, work, exercise and money. Most of the participants described at least one other process addiction, in addition to the sex and gambling. These process addictions were used to obtain one or more of the four rewards described earlier in this chapter and in Chapter 3 (Carnes, 2008).

#### **7.4.1 Food**

Five of the eight female participants reported compulsive over-eating, describing it as comfort eating. Their descriptions did not appear to meet the criteria for binge eating disorder. Many reported distress at weight gain after they stopped abusing drugs. One reported that she used to 'starve herself' to lose weight, but this was not sustained for long. None reported long term bulimia or purging food. However, many noted that they were able to keep slim during their years of drug abuse and they had been pleased with this unexpected side effect. Daisy was the only person who reported deliberately starting to use Whoonga with the aim of losing weight. However, in the interview she told me that she had lost too much weight and needed to re-gain some as she now looked too young. In sobriety, a few reported that they had switched to comfort eating. Cassie has gained a lot of weight since had she stopped using drugs and became celibate. She acknowledged that she used food to comfort her and she feels unable to stop overeating. Her sister died from complications related to obesity which further distressed her.

Mandy talked about how overeating helped her to control her feelings and how this had originated from her early years. Food for Mandy helped to numb her feelings and brought comfort to her, which she traced this back to early childhood:

*Food has always been a comfort thing, but from very little. I remember when I was in the orphanage, they would send you to these host parents. When I got there, as a five year child I'd eat five slices of bread, and I'd eat more if you didn't take it away from me. Food has always made me feel better. I've never dieted, I always overeat. I'd try to throw up but I'd never do that for more than one day. I haven't done it that often. I can remember before we went to the orphanage, my mom would give us food to keep us quiet. It became a comfort thing because she would give us something to eat and close the door so we wouldn't see what was happening, so it became a safe thing, a comfort thing and this has stayed with me throughout my life. If I'm happy, I eat, if I'm sad, I eat, because it fills a little bit that void. Afterwards, I feel terrible, but while I'm eating I feel fine.*

Like Cassie, Mandy had also gained a lot of weight since she had stopped using drugs. Mandy described compulsively eating high carbohydrate foods to improve her mood. A study of sex addicts (Carnes et al., 2005) found that 34% of the women reported compulsive eating and 26% reported bulimia or anorexia (n=588), which are higher rates than in the present study. Sussman et al. (2011) found a concurrence rate of 25% between eating disorders (mostly binge eating) and both chemical and other process addictive behaviours.

Fewer of the men reported issues with overeating. Two men said that they comfort eat and binge on food, particularly when feeling unhappy or stressed. One male, Joe, who is homosexual, described having periods of starving himself, bingeing and bulimia. This eating disorder has lasted for many years and is more prominent when he is not abusing substances. He recounted a cycle of obsession with food, periods of binge eating followed by self-starvation, vomiting and purging food, and excessive exercising. Joe says that he worries more about his appearance when he is sober and he channels his anxiety into food.

*I was doing coke and drinking a lot: 'coke bloat' then I saw a photo of myself and I saw how fat I was. Then I started drinking coffee all day and not eating and I lost weight and everyone said that I looked good (pause.) I know I have an eating disorder, addiction, whatever you want to call it...[in] Rehab I was worried about getting fat. I wanted to be the fittest person there. There was lots of starch, not proper gym food. So I'd eat it, cos you have to eat, and then vomit it out. I'd use the pocket money from my folks to buy eggs, milk and make myself egg smoothies. And then I realised, hey this is cool! I can control my body, my physique and eat as much as I like. I also found the vomiting a cathartic experience. After I vomited, I felt I was on a high: you feel good! You get rid of all the emotion inside. Your body goes into a strange kind of endorphin rush and I felt really good after having a catch. I've used Ipecac (an emetic) because you can't get enough out with just your fingers or salt water (pause). It's still a problem. I have a binge: peanut butter and syrup, bread. I tried to get sick but I couldn't; it was stuck! So the next day I*

*went on this starvation thing and exercised like mad. Because after you've eaten your body, your liver stores the excess as glycogen and you have only so much time to burn it up or it will get converted into fat. So I exercised flat out until I felt hungry again and I thought 'Good, I've used it all up'. By 6 o'clock the next evening I felt hungry again so I thought 'good'.*

He and Jill were the only two participants who reported bulimia. Jill did not find the purging as mood altering as Joe did. The lower rate of food addictions in males is similar to the findings of Carnes et al. (2005) that 18% of the heterosexual males (n= 894) and 20% of homosexual males (n=121) reported compulsive overeating versus 34% of the women (n=588). Rates of anorexia and bulimia were 5%, 8% and 26% respectively in those groups.

#### **7.4.2 Exercise**

In this study two males and two females presented with this addiction. All four described having times when they were obsessed with exercise and exercised to the point of injury. Ben described his experience of exercise in the following way: "That is about the only thing I can do now. When I run it becomes something I dwell on a lot. I won't run once a day, I'll run twice a day and I'll run further and further every time..." Ben used exercise to control his feelings of anxiety and is unable to exercise moderately. Joe reported spending up to six hours a day at the gym, swimming and doing other exercises such as weight training and running. He exercised obsessively more when sober but also used this as part of his purge or control cycle when he had been binge eating or using drugs. He described his belief that

swimming helped him to cleanse and detoxify his body after a drug or sex binge. Daisy and Jill also reported excessive exercise and both of these women reported binge eating. They also used excessive exercise as a punishment for excessive eating. All four participants saw exercise as a positive alternative to drug use, but Ben was aware that he was using the same obsessive thinking patterns which characterised his general addiction. Carnes et al. (2005) list excessive exercise as one of the eight process addictions that they assessed for and, overall, about 12% of their sample presented with “addictive athleticism” (n=1603), as opposed to a general prevalence in the population of 3% (Sussman et al., 2011).

### **7.4.3 Money**

In the present study, most of the women and half of the men reported problems with compulsive spending. None of this sample reported compulsive saving or hoarding of money. Most sample reported that they have spent money irresponsibly and have been unable to save it. This issue was independent of their need for money when they were using drugs. For many, this issue had become prominent after they had abstained from drugs. Paul explained his relationship with money in the following way:

*I'm very bad with money. As soon as I have it, I spend it often on unnecessary things. Like I'll say 'I'm going to save, I'm going to save' but it burns a hole in my pocket...*

Paul expressed frustration and bewilderment at his inability to save money or to exercise restraint with spending. He is aware that he makes unwise purchases but feels unable to stop them.

Joe reported a similar experience:

*You can give R100 000, R50 000, R20 000 or R5 000 and I promise you, it will just go. Don't ask me what I'll have spent it on. I've always been like that, 'cos there will be nothing substantial, nothing physical, I wouldn't have gone anywhere but it's all gone. Money just seems to evaporate.*

Both were distressed at their longstanding pattern of squandering any money that they earned, and many of the participants echoed these feelings, particularly those with children who felt guilty that they were failing to maintain them adequately. It must be noted that many were unemployed and several had many had never been formally employed or had earned money through illegal means, such as prostitution, drug dealing and gangsterism.

Carnes et al. (2005) found that one third of their total sample (n= 1603) reported addiction to compulsive spending and debting, and 10% had issues with compulsive saving or hoarding. The overall prevalence of shopping addiction is 6% with no special correlation with the other addictions (Sussman et al., 2011).

## **7.5 RELATIONSHIP ADDICTIONS**

Carnes (2008) lists four different categories of pathological relationships, as described in Chapter 3. These were co-dependency, trauma bonding, co-sex addiction and compulsive romantic attachment. Sussman et al. (2011) noted a 50% co-occurrence rate between sex and love addictions meaning that there is a high degree of overlap between these two addictions.

Each of these four categories of pathological relationships were experienced by some of the participants in this study.

### **7.5.1 Codependent Relationships**

This was the most common pattern of relationship addiction and took different forms. In some cases, the participants' parents (most commonly their mothers) or partners were in a codependent relationship with the participant. They engaged in pathological patterns of controlling, monitoring, sanctioning or enabling the addict's behaviour and these actions were opposed by the participant. Some of the participants were involved with other addicts, usually substance dependents. Some described codependent relationships with their addict parents. Andy's fiancée was also a methamphetamine addict and he described how they used to steal from each other and deceived each other when they needed money for drugs. All of his serious relationships had been with women who were drug addicts. Andy's father was an alcoholic and had never been emotionally available to him as a child whilst his mother had had a pattern of enabling him by assisting him financially. This caused conflict with his sisters who resented Andy for upsetting their mother with his relapses, and for being financially dependent on her. Andy describes how dysfunctional his relationships were with his girlfriends due to the drug abuse:

*The women were also using drugs so you live in this bubble of confusion.*

*You become codependent, definitely cos when you are on drugs you lose your self-ambition, you become scared there is an undercurrent of worry, you feel insecure, cos you know you're not doing the right thing, but when*



*you take the drugs, you're up, but then you come down and you rely on each other. It's kind of strange.*

Ben had had the same experience, in that all of his girlfriends were addicted to drugs and their relationships had also revolved around drug use. His first girlfriend came from a very wealthy home with poor parental control, and it is there that Ben was introduced to drugs. Raj described the many efforts he had made to stop his wife from abusing alcohol. He later developed a drug problem and his wife's drinking declined but she had sabotaged his sobriety when he was discharged from treatment by continuing to abuse alcohol in front of him. He recalls:

*Yes, she was drinking before we even met. She's always been drinking, even up until today. I tried everything to help her. I took her to SANCA, to the social workers, the people from NOCCA to come talk to her; I used to take her to Al Anon meetings...*

Ayesha's parents both abused alcohol and she described how her mother would wake her early in the mornings when she was drunk and demand that Ayesha make her a meal. Ayesha complied as she was afraid of her mother's reaction if she defied her. Tony used to help his father sell stolen goods and went gambling with him. Pria and Sipho used to accompany their gambling-addicted parents who used to give them money for gambling and drugs to ensure that they would not steal money to obtain drugs. Pria's father's enabling went further: he forced his wife to withdraw the assault charges that she had laid against Pria. Bulwer

(2003, 2006) noted that many of the gamblers in her study had patterns of codependent relationships. Pria says:

*We had a big fight. My mom, she called the Polices (sic), and that time I ran away. I called my Dad and said that he'd better come and give me money or else, before everything is going to be broken in this house! My Dad then bought it and came and I took it (Whoonga) and calmed down. I ran away again but the Polices they said 'she mustn't think she is clever' so that night when my Dad and I were sleeping, they came and they took me. My Mom had me arrested and the next day I appeared in court and I got released on R1000 bail. My Dad paid the bail. My Mom, she can't say nothing cos it's my Dad that wears the pants. My Mom withdrew (sic) the case.*

Most of the women reported that their partners had enabled their addiction through buying them drugs or giving them money to do so. Not all of their partners abused drugs themselves.

### **7.5.2 Trauma Bonding**

This is the second category of relationship addiction described by Carnes (2008) and an example of this is domestic violence. Four of the women described physically violent relationships that they had found compelling and felt unable to exit. Mandy lived with Jacobus for several years and he had severely assaulted her on many occasions and she described this very violent and abusive relationship in an almost off-hand manner which I interpreted as showing some degree of dissociation and general blunting of her emotions (see

section 6.3.2). Mandy had endured years of chronic physical and emotional abuse as both a child and an adult which she replicated in her years of doing sado-masochistic prostitution. Cassie described having had violent relationships with three different gang leaders that were based upon intense fear and violence, mirroring her years of neglect and abuse as a child.

Paul's mother had abandoned him when he was eight. As an adult he has repeatedly tried to re-establish a relationship with her and he is devastated when she repeatedly abused his trust, borrowed money from him which she did not repay, and rejected his offers and attempts to re-build a relationship with her. Trauma bonded people are characteristically exploited repeatedly either by the same persons or by different people, as they are unable to protect themselves from dangerous people or situations (Carnes, 1997).

### **7.5.3 Co-sex addiction**

Co-sex addiction occurs when the partner of a sex addict becomes obsessed with trying to control this addiction. This was not a common experience among the participants in this study. The women who prostituted generally felt that this lifestyle compromised their ability to have appropriate relationships with their partners and this had caused conflict in their relationships. Many of their partners had also acted as their pimps and drug dealers and had benefitted financially from their prostitution. Tony had had a series of relationships with prostitutes over a ten year period based upon heavy drug use, sex and working as their pimp. He described his experiences:

*The sex was all to do with the prostitutes. They were good chicks, but when you're married, you have to be good. But with the prostitutes, you*

*can enjoy yourself a lot more (looks embarrassed). I used to date them; I used to go out with them for maybe two, three months. Then, I'd change. You date one for a while then it becomes boring, routine and then I move on.*

Tony enjoyed the fact that he could control his girlfriends' sexual behaviour through being their pimp. When he became bored with one woman, he would replace her with another.

#### **7.5.4 Compulsive romantic attachment**

Love addiction, the other term for this relationship addiction, is characterised by short lived, intense relationships where the love object is often idealised (Sussman, 2010). Ayesha experienced this type of relationship addiction. She described repetitive patterns of meeting a man, falling in love with him, moving in with him and then ending the relationship after two or three months and feeling sad and disappointed when this relationship failed to make her feel better about herself. She expressed despair at her poor judgement. Anna and Sipho had similar experiences but they met a greater number of men via chat rooms, and described repeatedly falling in love with different men, and had a similar experience to Ayesha in that the relationships were very short lived. Both of them appeared to be hooked by the romantic intrigue and its mood altering effects.

## 7.5 CORE FEELING STATES

This is the fourth category of addiction listed by Carnes (2008), who states that it is essential to look at how strong feelings trigger and reinforce the other addictions. All of the participants identified intense feelings and the role they played in their addictive cycles. Most participants identified feelings of rage and many said that they had used addictive behaviours with numbing effects to self-soothe. Several described how they would set up a fight with family, begin to rage and then use that as a reason to exit to use drugs, gamble or act out sexually. Thabo described a typical pattern that involved his raging at his mother in an attempt to manipulate her into giving him money. The raging also increased his craving for the oblivion that the Whoonga would give him. He recalled:

*Yes, I did feel angry with myself for starting smoking, and then I'd go and smoke more! When I get R200, R300 and then I'd go spend it all, and I get angry with myself. I don't like to sit with my family because they frustrate me cos I think that they have money and they won't give me! I used to start a fight with my mother and I'd ask her for money. Sometimes she'd give me, sometimes she wouldn't give me and I'd start a fight with her. I'd tell her that she doesn't love me...*

All of the participants expressed enormous guilt and shame for what they had done and those who had children expressed profound regret for their failings as a parent. John demonstrated how feelings are not that easily categorised and that they were intertwined. John was involved in robbing people which he found exciting at the time, but he now feels guilty for

what he did: “When we went stealing, it was very exciting! We did it at night only and hey it was wrong, ah, now I’m not using drugs I think ‘Hey, that was wrong’...”

Mandy described how she felt powerful when raging and would place herself in dangerous situations which enabled her to feel exhilarated and omnipotent (the reward of arousal). Her childhood was extremely abusive and she re-created violent scenes in which she was now the aggressor as a way of compensating for her feelings of powerlessness as a child. In recovery, Mandy battled with anger and overreacting to people and intimidating them. She explained:

*I would go into flats where dealers won't go. If someone had stolen something from me and I was told it was at so and so flat, I'd feel nothing about going into that flat, threatening you with a gun that I'd just bought for 200 bucks, putting you over the table and threatening to let someone put one up your bum if you don't give me what I came for. I loved it, I loved the power! I thrived on it for a while. I think it is because for years and years I had no power. And I battle with that balance today.*

Some participants expressed a fear of experiencing emotions, such as Martin, for whom any strong emotion acted as a trigger to use drugs, masturbation or gambling to shut down his feelings. Jill described her fear of strong emotions and that she enjoyed methamphetamine because it eliminated all emotions. Most participants experienced self-loathing and hopelessness to the extent that they had one or more suicide attempts. Some expressed regret about this, but others felt ambivalent and expressed the view that they were a burden to their families who would be at peace if they were dead. These feelings were prominent when

discussing the psychological impact of the addictions, which are further explored in the following chapter, in keeping with the biopsychosocial model that guided this study.

## **7.7 CHAPTER SUMMARY**

This chapter presented a discussion and analysis of the experience of multiple addictions as described by the 25 participants selected from the general survey participants. The in-depth interviews formed the third phase of the mixed methods concurrent embedded design utilised to answer the research questions regarding MA and AID. The objective (number three) addressed by this chapter was the exploration of the participants' experiences of multiple addictions through in-depth interviews and thematic analysis of the transcripts. Chapter 6 explored the participants' relationship to substances and this chapter examined the other three categories of addiction (Carnes, 2008). It became clear that these addictions had generally developed concurrently and interacted from the onset of the illness resulting in a condition in which the whole was much greater than the sum of its parts. The biopsychosocial framework provided an holistic paradigm within which these complex experiences were explored and analysed. This chapter has laid the foundation upon which the relevance of the model of AID can be assessed to answer research objectives three, four and five, viz. exploring the participants' experiences of AID and treatment, and establishing how professional staff assessed and treated MA and AID.

## **CHAPTER EIGHT**

### **DATA ANALYSIS: ADDICTION INTERACTION DISORDER AND TREATMENT**

#### **8.1 INTRODUCTION**

The previous chapter explored the participants' addictions to substances, processes, relationship and core feeling states over which they were powerless and which had made their lives unmanageable. This chapter takes this process one step further by examining how the different addictions formed unique patterns and interacted to create an experience that was far more potent than the sum of the separate addictions. It addresses the research objective of exploring the experiences of addiction interaction. The biopsychosocial framework utilised in this study guided the interview process, and enabled me to examine how these different addictions interacted in the participants' lives and which of the ten patterns described by Carnes et al. (2005) were experienced by them. This chapter investigates the participants' understanding of the consequences of addiction and their treatment experiences. It concludes by presenting the findings obtained from the discussion groups held with the mental health care professionals regarding current treatment approaches and their assessment of the importance of the phenomena of MA and AID.

#### **8.2 ADDICTION INTERACTION**

“If each addiction brings unmanageability in a patient's life, it would be clinically negligent to think that the resultant chaos from each does not compound the problems of the others. The whole may in fact be more than the sum of its parts” Carnes et al. (2005, p. 81). The



concept of addiction interaction resonated with all of the participants, despite the fact that they had not previously encountered the concept. None of them had been assessed for addictions other than their substance dependence and none had received interventions that looked at how the addictions could combine to create a more complex illness. Cassie said, upon reflection: “Definitely the addictions fuelled each other.” Kelsey described her addictions in the following way: “I’ve got no line: sex, booze, drugs, bring it! I want it! I want it every day! It was a want now it is a need: I need it to live.” Her statement demonstrated how her different addictions combined to produce intense craving, displacing any other interests or priorities in her life.

My literature search revealed one study which investigated the prevalence of the ten patterns of AID by Carnes et al. (2005) who developed and tested the concept of AID through content analysis of worksheets on addiction interaction that had been completed by 650 patients over a four year period, as discussed in Chapter 3. Flores (2004) lists eight patterns of addiction interaction which are similar to those of Carnes et al. (2005), but does not discuss prevalence of nor research to establish the relevance of these interactions. I explored the concept of AID with the 25 participants and assessed whether any of the interactions were applicable based upon the participant’s account of their addiction history. Joe’s reflections provide an insight as to how complex that interaction can be:

*When I’m at my physical peak, fitness wise, I’m not obsessing about anything I get to that restless stage and I think ‘now what?’ So I then sabotage myself by either eating too much or I’ll not take my antidepressant for 3 days so that I actually start to feel something. I start*

*controlling the things around me I 'm so f'd up, excuse my language! I  
have to give myself a problem!*

Joe's description shows that even when he is not using drugs, he is still behaving compulsively and his restlessness invariably leads him to relapse to one of his addictions.

An average of four patterns for each participant was identified through discussion and analysis of the interviews. The ten patterns are now discussed with examples from the participants' descriptions and accounts of their experiences. Table 8.1 provides a summary of the patterns identified by the participants in this study, and compares this with the percentage of sex addicts who identified the various patterns in the original study conducted by Carnes et al. (2005).

**Table 8.1 Addiction interaction patterns experienced by the participants (n=25) and as reported by Carnes et al. (2005)**

Interaction	Females n=8	Males n=17	Total n=25	Carnes et al. (2005) n=650
Cross Tolerance	1	8	9	61%
Withdrawal Mediation	6	8	14	56%
Replacement	1	4	5	43%
Alternating addiction cycles	1	2	3	41%
Masking	5	9	14	45%
Ritualising	3	9	12	41%
Intensification/ Fusion	4	15	19	61%
Numbing	7	7	14	52%
Disinhibiting	4	12	16	42%
Combining	2	4	6	46%

### **8.2.1 Cross tolerance**

This pattern has two possible manifestations: the person either experiences a simultaneous increase in two or more addictions or they abruptly switch addictions without needing the normal developmental sequence to increase the second (Carnes et al., 2005). In this study, cross tolerance was experienced by more males than females and one third of participants described this pattern compared to 61% of the sample in the research conducted by Carnes et al. (2005). In my study, those who identified this pattern experienced it with substances, most commonly moving to heroin or Whoonga from alcohol or dagga, and with the addiction escalating very rapidly. Many explained that the alcohol or dagga was no longer achieving the desired effect which was why they had changed or added new drugs to their repertoire. The other participants experienced a rapid escalation in a process addiction either after starting a new drug or attempting to stop using a drug.

Raj found that his addiction to crack and sex with prostitutes developed simultaneously and escalated very rapidly. These two addictions caused significantly more chaos in his life than his years of using alcohol, dagga and Mandrax which he believed had caused fewer negative consequences. Raj experienced a rapid rise in his tolerance for crack cocaine which made him think and behave sexually in ways that he would never have previously considered. Raj explained: “I was smoking (crack and Mandrax) then I felt like I needed a woman. I went to escort agencies:[name of escort agency] and had a woman. Then one woman wasn’t enough, so I asked for two. We smoke, we drank, we partied...” Raj’s experiences demonstrated how his threshold for excitement with prostitutes escalated quickly, in concert with his use of crack cocaine and Mandrax, and he soon needed to hire two or more prostitutes to obtain the

same mood altering effect. The crack also brought out other sexual behaviours that will be discussed when the pattern of disinhibiting is reviewed (Section 8.2.9).

Other participants reported that drugs, especially Whoonga and crack cocaine, increased their sexual desire and many reported how they increased their pornography viewing when using these drugs, demonstrating cross tolerance between substances and sex addictions. Tony stopped gambling very abruptly and his addiction to methamphetamine escalated rapidly thereafter. He had a prior history of poly-substance abuse but the methamphetamine replaced the other drugs. He had previously been very involved in gambling, but he noted that he had needed the money for methamphetamine. He had a high tolerance level for amphetamine from the first hit and further escalated its use by changing the means of administering the drug. He began using methamphetamine intravenously to get a “bigger hit”.

### **8.2.2 Withdrawal Mediation**

This pattern involves substituting or increasing one addiction to reduce the discomfort associated with stopping or reducing an addictive behaviour. Very commonly people increase tobacco consumption when they stop using other drugs. In this study, half of the men and most of the women identified this pattern and reported that they had used food, gambling or romantic intrigue to reduce the pain of abstaining from substances. They had either stopped using the drugs when admitted for treatment or attempting to achieve sobriety on their own. Half of the women who reported this pattern said that they were coping without drugs and sex by eating to excess and complained of weight gain, and one participant noted that she had had a lifelong problem with comfort eating. Two women reported using romantic

intrigue during previous admissions to a rehabilitation centre to distract themselves from the loss of ‘getting high’. Anna recalled how she flirted with different men during her previous admission for treatment of her Whoonga addiction: “But I wasn’t serious the last time I was here, I won’t lie to you. I was playing around, every time I was caught with this guy, kissing (giggles).” Anna used the excitement and drama inherent in seducing various men whilst in treatment, which was strictly forbidden, to ameliorate her withdrawal from Whoonga.

Pria’s family took her to the casino to help her stop using Whoonga. She talked about gambling:

*Yes! That was the only thing that was keeping my mind going without the drugs. So like I know I’m going 11 ’o clock and I’m coming back 10 ’o clock in the night, just for me to smoke a cigarette and go to sleep.*

Similarly to Anna, Pria used another process addiction, in her case gambling, to help her stop using Whoonga. Some of the males with sex addiction issues reported that when they had stopped having a series of casual sexual encounters, they had used pornography to cope. Martin reported an increase in compulsive masturbation to help him manage without Whoonga. He felt great shame about the masturbation, as was discussed in Chapter 7.

The above examples demonstrated the use of processes to ease withdrawal. Many participants substituted different substances for their drug of choice to cope with withdrawal. All but one of the 25 participants reported that their cigarette smoking had increased significantly when they stopped taking drugs and most said that it was “the lesser of two

evils” (Cassie). David and Thabo reported that they used alcohol to help them cope with the discomfort of withdrawal from Whoonga when attempting to stop using this drug on their own whilst living with their families. Thabo’s family sent him to his sister in Johannesburg to force him to stop using Whoonga. It was interesting to note that some of the families did not see the alcohol use as being problematic and assumed that because the participant was not using Whoonga, they were getting better. This could be due to ignorance regarding addiction, and/or denial by the family that their family member was an addict, as he or she was able to stop using one particular drug which they saw as more problematic than, for example, alcohol. Thabo was admitted to rehabilitation for Whoonga addiction but also listed alcohol and dagga as drugs of abuse. He recalled how he coped without Whoonga: “The only time when I stopped smoking [Whoonga] was when I stayed with my sister in Jo’burg for one month. I drank alcohol; I smoked dagga, just to...” Thabo could not stop using Whoonga without substituting it for other drugs. It was worrying to note that his family tolerated his alcohol abuse and did not understand that he was still addicted. They only supported his desire to seek treatment when he relapsed back onto Whoonga.

### **8.2.3 Replacement**

This pattern of addiction interaction can be distinguished from cross tolerance or withdrawal mediation because there is a time lapse in the addictive behaviours of at least six months to a year. A new addictive behaviour is adopted to assist the addict in dealing with the stress of sobriety. Treatment programmes need to be vigilant in educating addicts and their families that stopping drug use is not sufficient to maintain sobriety. All four categories of addiction need to be addressed to avert the possible danger that an addict, such as Pria, will see

gambling as a safe diversion from her addiction to Whoonga. Some participants in the present study reported an increase in their use of pornography about one year after they had ended a pattern of having sex with multiple partners. For example, Lwazi stopped meeting girls online when his girlfriend fell pregnant, but started masturbating compulsively to pornography about a year later. He recalled:

*I met about four different girls through Mixit... this was from 2006 to 2008. I stopped meeting the girls online when my girlfriend fell pregnant with my baby... [later] I looked at pictures of nude girls, ah, that type of pictures. It was the only thing that I could do with my phone! My girlfriend found the pictures she said why have you got these pictures? She told me to delete them then I deleted them.*

Lwazi continued to view pornography, but was more careful about covering up his addiction. He is still involved with this girlfriend, although each still lives with their parents.

Paul developed an addiction to child pornography after he became sober from drugs. This addiction manifested after he left the strict confines of the treatment programme and was living in a less restricted environment. He has remained sober from drugs, but his addiction to child pornography developed in its place after several months of sobriety. He explained: “And it’s gotten worse, stronger over the time because I fed it more and it’s grown from this insignificant thing to this big...” This addiction offers the same reward as the drugs: numbing and soothing. The drugs and pornography enable him to feel calm, numbed and disconnected from the present.

### 8.2.4 Alternating Addiction Cycles

This pattern requires vigilance on the part of the practitioner as these cycles can extend over significant time periods (Carnes, 2008). Only three participants in this present study reported this pattern, the smallest number to identify a particular pattern. Most had shown no noticeable shift in addictive patterns, which had escalated without the shift characteristic of alternating addictive cycles. Carnes et al. (2005) found the lowest proportion of their sample, 41%, reported alternating addiction cycles. John's story illustrates this cycle: he reported an established habit of using Mandrax only when his favourite brand of this drug was available. His other addictive pattern involved increasing his dagga use and gambling for those months when this brand of Mandrax was unavailable; he does not gamble much when using Mandrax. This is a set pattern that he has had for about eight years. He stated:

*The merchant has Double Star [brand] February, March, April, June and then it is finished, ah, and then I take a break for two or three months because I don't like the other Mandrax. Then I only gamble, smoke zol, gamble, smoke zol, because you don't get the Double Star.*

Two other participants described patterns of sexual acting out with heavy drug use and then periods when they abstained from drugs and sex and exercised excessively, obsessed about their eating and restricted their food intake. They thought of these periods of restricted eating and excessive exercising as sobriety, failing to recognise that the hallmarks of addiction, namely, obsessive thinking and powerlessness over the behaviour, continued during these periods. These 'sober' periods would last for several months and then they would again



relapse to drugs and sexual acting out. However, the ‘sober’ periods were characterised by compulsive ‘not eating’ and excessive exercise, as in the case of Jill who recounted:

*Yes, I sometimes go off food and get down to 50 kgs. I do it so I can have some sort of control while I’m clean, you know, ah, ‘cos when I’m clean I don’t know what to do with myself I have no sense of control. It’s so boring, it’s insipid, it’s um (pause). So if I can have control over my weight. Like at the moment, I have no control over my weight. I’m so fat! All I’m thinking about now is trying to get off the crystal, trying to get off the crystal. Crystal is the worst drug! And now look at my weight!! I feel I have no control at the moment. If I were to leave here I’d probably diet again...I used to play soccer for ladies’ teams. When I was dieting I’d run a lot and not eat and only eat like a slice of cheese before I passed out ...*

Jill believed that her periods of severe dieting and excessive exercising were evidence that she could control her urge to use drugs, particularly methamphetamine, which she described as her drug of choice. She maintained this rigorous regime to ensure that she remained sober from drugs.

When I interviewed Joe, he had been sober from drugs for about two months. However, he was restricting his food intake and exercising excessively. He had lost weight since becoming sober and he was obsessing about his appearance. He described his behaviour thus:

*I obsess with exercise: I swim for hours a day. I discovered that with exercise that it helps with my anxiety. At the moment, I swim two, three*

*times a day. If I've binged, uh, like the other day I binged and I went to the gym and I exercised for like four hours non- stop until I feel hungry again and then I know I'd worked it off.*

Joe was also purging himself with laxatives and vomiting as ways to control his weight but he believed that because he was not using drugs, he was sober. Neither Jill nor Joe saw their eating and exercise as part of an addictive cycle. Their behaviour when abstaining from drugs was part of what Bradshaw (2005, p. 135) calls the “control–release cycle”. The same features of addiction: powerlessness, obsession and unmanageability were present in their ‘clean’ eating and exercising cycles, as had been in the drugging and sexual acting out. They both realised that they used their dieting and exercise to distract themselves, to make life more interesting and challenging as both found sobriety boring. The control cycle also offers the illusion of sobriety which is the reason why the participants adopted this new pattern of behaviour. Many of the participants described anhedonia, or being “pleasure deaf”, in that sobriety was boring and life was dull. Anhedonia is a re-setting, by the addiction, of the brain’s threshold for the perception of pleasure (Erikson, 2009) and is the reason that addiction can be described as “Pleasure Unwoven” (McCauley, 2009).

### **8.2.5 Masking**

Masking involves the use of a more socially acceptable addiction, such as alcohol abuse, to cover up a second addiction that carries a stronger social sanction, such as going to prostitutes. Half of the participants in this study identified with this pattern. They identified that their drug use was often used as an excuse for their sexual behaviour. This included

going to prostitutes, experimenting with different sexual behaviours such as fetishes or, as Raj recalled, experimentation with homosexual sex:

*But after a while this is when all of the stuff about men started coming in. That's what rocks (Crack) does to you! If you are sitting, smoking and another man is sitting there, smoking and you've stripped your clothes, you start looking at him and wanting to have sex with him. I've tried but I could not do it. On the rocks, all you want to do is have sex, have sex, have sex...*

Raj had had several previous admissions to treatment and had never been asked by the staff at those facilities about his gambling or sexual behaviour. He had felt too ashamed about his sexual behaviour to discuss it with the treatment team. The sex and gambling addictions were as serious as his addiction to the substances. Raj told me after the research interview that he was very relieved to have had the opportunity to explore if his behaviours were normal, as they had concerned him. He said that he would have been too embarrassed to discuss his sexual activities without the specific assessments and opportunity to talk about his gambling and sexual behaviours. Similarly, Lwazi, who was in treatment for the first time, had also developed a substantial sex addiction, which he attributed to Whoonga. He recounted his experience:

*If you're smoking the sugars you want sex! I had lots of girlfriends. It worried me because, hey, I couldn't go without sex it wasn't normal! I didn't want the girls to know that I was there just for sex. I didn't love them I just wanted a lot of sex.*

It must be noted that Whoonga did not have this effect on all of the participants. Both Daisy and Peter expressed concern that Whoonga had made them unable to achieve orgasm and they had lost interest in sex due to this drug.

None of the female participants reported that their drug use led to them watching pornography, whilst three of the males reported that they had only developed an interest in pornography once using drugs regularly. They developed an addiction to pornography and rationalised this less socially acceptable addiction by stating that the drugs had brought it out. David used to watch pornographic films at his friends' homes:

*It was watching movies with my friends. The friends get the movies and they call us and say that they've got this movie, that movie, X Rated, erotic and we all go to the friend's house, smoke and watch the movies.*

David had felt as powerless over his urge to watch pornography as he had felt over his craving to use Whoonga, but felt far greater shame over the pornography addiction.

### **8.2.6 Ritualising**

In the context of addiction interaction, this pattern occurs when the rituals which involve cues or routines for one addictive behaviour are the same or similar for another addiction. The rituals are used to produce a trance-like state and prepare the addict for his or her acting out. Carnes (1989, p. 64) notes that "it is absolutely essential that therapists and recovering addicts recognise the powerful role of rituals in addiction". Many participants in this present

study reported this pattern when I asked them for a detailed description of their typical day or weekend. Their rituals for obtaining drugs became part of their gambling or sex addictions.

Andy developed a gambling addiction when using methamphetamine and made money for gambling and drugs by selling antiques. For Andy, buying and selling antiques was exciting and was part of the ritual in preparation for going to the casino for a binge on methamphetamine and gambling. He talked about his experiences:

*I was buying and selling antiques and I became obsessed with this. I love the industry. I was going out to auctions, to new places and buying. I knew how to make money; I was making R2000 to R3000 per day. For me, buying and selling was the way of making money: making 300 to 1000% mark up! In two months I'd mastered it! Being on crystal made it so exciting like a treasure hunt; it was so exciting!*

Andy experienced speculating on antiques as a powerful cue that prepared him for buying drugs and going to the casino: the same ritual was the harbinger of both addictive behaviours.

Joe and his partner developed a weekend ritual that involved using copious amounts of drugs (mostly stimulants) and “marathon sex sessions”. During the week he would “only use” dagga and alcohol, eat healthily, and attend the gym for several hours a day. The process of buying CAT would be the ritual that heralded the start of two addictions: sex and drug binges that would last until Sunday night. He described his experiences:

*In terms of the sex, the first time I had gay sex on CAT I remember being completely and utterly blown away and I wanted it again. I was almost a virgin, sexually. It used to be so complicated before that. We used to have sex marathons the whole weekend: snarf (inhale the powder through the nose)and have sex. We'd go out, get drunk, get drugs at the gay clubs.*

Joe's use of drugs and his "sex marathons" which also involved viewing pornography, were both preceded by the ritual of buying the drugs and served to prepare Joe for the weekend binge. Krish had a similar experience in which buying dagga prepared him for two of his addictions: smoking dagga and viewing pornography. He recalled:

*Pornography! I was looking at it whenever I got a chance, ah, at work, when I came home from work I used to put the computer on and look at the girls. I used a computer, not my cell phone. I didn't look at the porn if I was sober. The dagga was the worst: it made me go crazy!*

Krish would use the act of going to his dealer as the trigger that induced a state of anticipation for both the substance and sex addictions. When the same ritual is the cue for two or more different addictive behaviours, it is likely that they will become fused through the next pattern, intensification.

### **8.2.7 Intensification**

Carnes et al. (2005) state that intensification refers to different addictions being combined to enhance and increase the effect of the others. The pattern generally starts out as a binge and,

through the favourable effect, the behaviours can either remain separate from each other or become fused, either partially or fully. In a pattern where full fusion has occurred the addictive behaviours will only take place together. Each addiction on its own is insufficient to obtain the desired mood-altering effect. Most of the participants in this study reported this pattern, with 13 of them reporting a total fusion of their addictions. Ben described how he became involved in counterfeiting money and the excitement he derived from that activity and running drugs intensified his use of cocaine and heroin. His account demonstrated how the different addictions amplified each other, and how they became fused. He spoke about his experiences:

*I started running drugs for a dealer in the (name of town) area. I would be given 30 bags a night to sell. I started counterfeiting money. The dealing fuelled the drug habit. I began smoking crack with Jenny. We then started using heroin and Pethidine.*

Ben's addictions were to substances and to high risk activities (core feeling states) and each fuelled the other addiction. The thrill of drug running and the drug taking became totally fused. After the thrill obtained from these high risk activities and using cocaine, Ben and his girlfriend would relax by using heroin and later Pethidine. Eventually the entire cycle was needed to get a satisfactory effect. Each activity on its own was insufficient.

Martin described a similar high from robbing people and this was part of his ritual on a Friday evening. He would use drugs, mug and rob people in the clubs and then use more drugs often to the point of losing consciousness. He would usually pick up a woman in the

club and they would have sex and use drugs together, with each activity intensifying the effects of the other. His was a partial fusion because he was able to engage in the activities separately, but his preference was for the whole cycle described above.

Kelsey described how the different drugs that she took influenced her sexual behaviour. After a few months, the drugs and sex were totally fused: when she was under the influence of drugs, she wanted to have sex, and when she wanted to have sex, she would need to get high on drugs. However, the type of drug she took would influence her sexual activity and preferences, as she described: “Coke it makes you awake and you’d really be going at it; weed and booze makes you tired and lazy. It depends on which drug I was using.” Kelsey’s two addictions became completely dependent upon one another; each addiction on its own could not provide her with a sufficient “high”.

Several participants reported that combining drugs and gambling produced a better effect. Andy explained that he had only felt the urge to gamble when he had started using methamphetamine, and could only gamble when high on this drug. This experience is also an example of cross tolerance, the first pattern described in this chapter. Andy described a cycle in which he would obtain money, either through stealing from his fiancée or his family or through speculating on antiques. He and his fiancée would buy methamphetamine and go to the casino where they would stay for three to four days without sleeping, bathing or changing their clothing. They would gamble and use methamphetamine, either in the car or toilets. The two addictions could not exist without each other. After this binge, they would take a



sleeping tablet and ‘crash’ for two days and resume the cycle. Andy also began using pornography during this time, as he felt emotionally disconnected from his fiancée.

John described a similar experience of intensification with gambling and dagga and only engaged in the two activities together; they were totally fused. He also experienced fusion with two other addictions: his use of alcohol and acting out sexually with prostitutes. Note that the drug that he used, as with Kelsey, determined what other addictive behaviour he selected to complete the “dopamine cascade” (Carnes et al., 2005, p. 101). John explained:

*When I go gamble a lot and I smoke a lot, then I usually go and use a lot of drugs. Yes, and then I gamble a lot and I lose, ah, then I go rob people, and then I say ‘let me stop gambling’ I’ve lost a lot of money! But when I’m drunk, I just want to go to prostitutes. In the morning, I feel bad because of what I’ve done. I feel depressed sometimes after going to prostitutes. But sometimes, when I’m with a prostitute, I’ll make a proposal, so I won’t have to pay the next time I have sex (laughs).*

It can be seen from the above accounts that the participants coordinated the effects of the drugs and behaviours to obtain the maximum impact, such as stimulant use and a gambling binge to sustain the euphoria and sense of power, or alcohol and dagga and sex with prostitutes to feel relaxed and comforted. In most of the accounts described above each addiction on its own, such as alcohol, would be insufficient to obtain the desired effect for the addict; the addictions had become fused.

### 8.2.8 Numbing

Numbing as a pattern is used to reduce or remove the shame of addictive acting out. As one of the four “rewards” of addiction, Carnes (2008) contends that numbing is an indication that the person has experienced trauma and is using the addiction to comfort and soothe themselves. It has been found that developmental trauma is linked to affect dysregulation and numbing assists the person in coping with stressors as they lack more functional ways of dealing with problems (Kinniburgh et al., 2005; Van der Kolk et al., 2005). Although half of the respondents utilised this pattern, far more women (seven of the eight) reported using their addiction to soothe or remove uncomfortable feelings, as opposed to under half of the men. Most of the women had experienced trauma prior to their drug debut, which was consistent with previous studies (Diessen et al., 2008; Opitz et al., 2009). Cassie found that Mandrax calmed her down, and she used it for over 30 years. She recalled:

*I smoked Mandrax because there was a time when I had a terrible inner nervousness in me. I didn't shake on the outside, but I was shaking on the inside. But when I smoked the Mandrax! Many years I used the Mandrax as medication and I smoked right up until I stopped using drugs.*

Cassie had been exposed to childhood incest, parental neglect, was institutionalised at the age of six, and had been forced to place her child in adoption when 16 years of age. These many traumas resulted in her experiencing, in her words; an “inner nervousness” which was removed by Mandrax.

Jill reported a similar reason for taking drugs. She battled to control her emotions and struggled in particular with anger management issues. Drugs helped her to numb her feelings. She explained: “I like the escape and the warm feeling. I don’t like reality much, umm; it’s a sense of feeling OK. When I’m not taking drugs I feel, like, all over the place...” Jill began smoking at the age of six, using dagga from the age of nine and has relied on drugs and other addictions to help her to control her emotions. Anna experienced similar rewards and sensations from her drug and sex addictions. She believed that the drugs had helped her to forget about her rape: “Just not to think about it, things, just to forget about things. Cos when I’m smoking, I feel much better, I feel OK. I’m in my own world when I feel drunk.” For Anna, the primary reward of addiction was to numb her feelings of being sad, unworthy and unlovable which is the message that her caregivers had given her. She used drugs that calmed and soothed her to remove some of the shame that she felt from her rape and continued to use the drugs to cope with the guilt that she experienced from her sexually compulsive behaviours.

For Sipho, his sexual acting out began before his drug use and he was using Whoonga to numb the shame of his sexual acting out, which included compulsive masturbation and multiple gay partners. Many of the men expressed great shame about their sexual acting out, which was generally expressed by having multiple partners, paying for sex and compulsive viewing of pornography. They used the drugs, generally alcohol and Whoonga, to numb that shame. Tony used the drugs to numb the guilt about his criminal activities. He explained:

*We used to hold up the money trucks, ah, I did a lot of bad things and hurt a lot of people. We used to break into offices, break into houses, all to*

*wear lekker (nice) clothes, wear nice clothes, I suppose. The drugs got very bad.*

Tony had been exposed to violence and introduced to Welcanol during his years in the South African Defence Force and this potent combination of fear and power (the combat) followed by numbing (intravenous use of Welcanol) set up a powerful addiction cycle which he replicated when involved in criminal activities. Tony used heroin and alcohol to numb the shame of his criminal and violent behaviours.

### **8.2.9 Disinhibiting**

This pattern refers to deliberately using one addiction to enable acting out in the second, for example, getting drunk before searching for a casual sexual partner. There was an equal distribution between the genders and two thirds of the participants in the study reported this pattern compared with the 42% found by Carnes et al. (2005). Most of the participants who presented with this pattern reported feeling guilty about one addictive pattern, such as prostitution or high risk behaviours (stealing, gang-related violence) and they would take drugs so that they could engage in that behaviour. They reported using stimulants such as crack cocaine before going to prostitutes, or central nervous system depressants such as alcohol before searching for casual sex partners or robbing people. These drugs were able to remove inhibitions, or reduce the control exerted by their morals or values, which are located in the frontal lobes of the brain. Over a period of time, part of the long term damage caused by addiction is referred to as “hypofrontality” (McCauley, 2009) in which the frontal lobes of the brain lose or have reduced influence on behaviour.

Ayesha used drugs to give her the freedom to have many casual relationships with men. She described her experiences:

*I tried it (drugs) and it became a every weekend thing. I also took rock (crack cocaine), alcohol, ah, I started having these affairs when I was still living with my husband and then his mother found out. I was going out, hooking up with guys, going to their place.*

Ayesha developed a pattern of compulsive seduction of men but in order to “hook up with guys”, she would need to take alcohol or crack cocaine to make her sufficiently disinhibited to behave in this manner. Ayesha felt completely powerless over her urge to seduce multiple partners and her use of drugs which cost her both her marriage and regular contact with her daughter.

Raj described how crack enabled his sexual acting out which involved fetishes, in his case, wearing women’s lingerie and paying for sex which included group sex.

*I’d smoke rocks, then if I was at home, I would get excited and I would put on lingerie, play with myself... I knew a lady friend who was near the shebeen, I’d call her in 11 ’o clock at night, ah, till 5 – 6 in the morning we’d have sex.*

Raj was only able to act out sexually once he had used the drugs which removed his inhibitions enabling him to engage fully with his sexual fantasies.

Sam also experienced the disinhibiting effects of crack on his sexual behaviour, as did John and Lloyd. Sam recalled: “If I don’t smoke, I don’t watch the videos. If I smoke rocks then I need to have a girl or watch the videos...”

Many of the men described how they needed to be under the influence of drugs to act out sexually, especially behaviour about which they felt guilty, such as going to prostitutes, masturbating to pornography or cruising for casual sexual partners. Drugs also had a disinhibiting effect upon participants’ gambling behaviour, as seen with Andy and Jill.

#### **8.2.10 Combining**

This pattern involves combining addictive experiences to sustain the high which Carnes (2008) compares to riding the crest of the wave for as long as possible. A few participants reported this pattern. Mandy described ‘candy-flipping’, mixing LSD and ecstasy, which increased the effect of each drug and enhanced the LSD’s ability to produce a sense of being removed from reality. Tony used snowballing: mixing heroin and methamphetamine in an intravenous injection to go “up and down, up and down”. Andy used to use cocaine so he could sober up from alcohol and then repeat the binge cycle. The cocaine enabled him to consume more alcohol and feel its effects for longer. Joe combined amphetamines with “sex marathons” to get a sustained high over a few days, as described earlier.

### 8.3 IMPLICATIONS OF ADDICTION INTERACTION DISORDER

The findings in this chapter demonstrate that addictions seldom existed in isolation. If a person had more than one addiction there was a very strong possibility that they were intertwined in various ways. The possibility that they existed as discrete entities with no relationship was remote. The experiences described by the participants made it abundantly clear that their different addictions combined in a variety of ways to create a more powerful and damaging illness. Carnes et al. (2005) found that the different addiction activities are selected by the person, usually through a process of trial and error learning, to obtain or maintain a specific effect. This effect is obtained through the manipulation of substances and/or activities, individually or in combination, to create a reaction in the brain neurochemistry.

Examples of the effect upon brain chemistry are blocking dopamine re-uptake in different areas of the brain (cocaine, sex, gambling) and releasing other neurotransmitters such as GABA (alcohol). The desired results range from euphoria, elation, fantasy, to dissociation or deprivation (Carnes, 2008; Flores, 2004). The participants' experiences described in this study show how they utilised and synergised the different neurochemical reactions from their addictions to enhance the effects they wanted to experience. Martin's description of a 'typical week' provides a good example of MA and AID.

*Clubbing like I go like all the time on the weekend. When I'm going to the club I won't tell my girlfriend, I'd just tell her that I'm at home. I used to feel bad sometimes, but what she don't know don't hurt her. I go to town on the weekends when I got money on me: money from robbing people. I*

*go to town, I buy my drugs, my rocks and the Whoonga and then I go to the clubs. As I'm in the club, I see if say, that person's drunk, then I'll go up to them and I'll start searching them. The girl will sit where she is we'll have sex on the beachfront or sometimes book a room. I'm awake the whole weekend; the rocks don't make you sleep. On a Monday, Tuesday or Wednesday, that's when I'd go to prostitutes. The gambling is like Monday to Friday.*

It is vital to see beyond the fact that Martin used crack and Whoonga. If that is the sole focus of the practitioner, then a major part of Martin's story is missed. Martin starts with the risk and intensity of robbing people during the week. He begins to feel powerful and in control, in stark contrast to his childhood where he was severely neglected and sexually abused. Martin then buys his 'binge drugs'; crack (to go up) and Whoonga (to soften the crash inherent in the effects of crack wearing off and to relax). Under the influence of the crack and Whoonga, Martin goes to night clubs. He again robs people and feels the thrill of being able to dominate people. He will also have noticed a girl whom he assesses as a potential sexual partner and who is viewed as a passive recipient of his attention; "the girl will sit where she is". He will seduce her and offer her drugs. They will have sex either at the beachfront or they will hire a room. Martin will keep using the crack and Whoonga and will be awake for the entire weekend. He will have sex with the girl or will watch pornography on his cell phone. After the weekend, Martin will soothe himself by going to prostitutes who are more predictable than the casual girls he meets. He will switch his drug use to alcohol and dagga to 'maintain himself' until the weekend. He will gamble to make money for the



prostitutes and, again towards Friday, rob people to pay for his trip to the night club on Friday night. He is also masturbating compulsively several times a day to comfort and soothe himself.

All of the participants in this study found that the concept of addiction interaction resonated with their experiences of their addiction with the an average of four patterns being described. Intensification was the pattern most commonly experienced in this sample, followed by withdrawal mediation. Most of the participants had not, prior to the interview process, seen any connection between their addictions. In fact, the majority of them did not realise that they had a problems with sex or gambling. Those participants who had previously received treatment had never been assessed for other addictions and multiple addictions had not been specifically addressed in treatment. Raj, for example, said that he thought that his sex and gambling behaviour were what “all men did”. Kelsey did not realise that she had a problem with sexual behaviour, “I didn’t think that I had a problem until I did the test. And then I did the test and I thought ‘Oh boy’!”

It therefore requires vigilance on the part of the professional to assess for other addictions. Many of the participants in this study, as demonstrated by Kelsey, did not realise that their other behaviour was part of their illness. The final two issues we will examine are the participants’ understanding of the long term consequences of their addiction and their previous treatment experiences. The discussion of the treatment experiences will be complemented by the views of the professionals involved in treating addiction.

## **8.4 CONSEQUENCES OF ADDICTION**

All of the 25 participants expressed great sadness and remorse at the devastation that their addiction had wrought upon their own lives and that of their families, friends and the community. The most common regrets were for opportunities and time lost and many spoke very poignantly about how they had lost their adolescence. Their opinions and experiences were very similar with grief and regret being the overriding emotions expressed during this phase of the interview. The losses or consequences of addiction fell into general themes, which can be analysed using the biopsychosocial model that guided this study. The consequences were as follows:

### **8.4.1 Biological Aspects**

A few of the older participants now have serious health problems due to their years of substance addiction and their lifestyle in which they neglected their health. For example, Raj said that having a stroke had given him a “big fright”. Tony was quadriplegic due to years of intravenous use of methamphetamine. Cassie and Ben have both developed chronic kidney disease; Cassie had to have one kidney removed and also has hypertension. Sam, the youngest participant with health problems due to addiction, had to have extensive facial reconstruction surgery after he was accidentally shot at a shebeen. Jill developed a psychotic disorder due to her use of dagga and other drugs.

### 8.4.2 Social Aspects

The participants described a range of negative consequences that their addiction had wrought upon their social functioning, ranging from the financial problems caused, to the collapse of important relationships, all of which impacted upon their adjustment in society.

#### a. Financial problems

Many of the addicts, particularly the adults over the 30, spoke about how their drug use had impacted upon their financial situation. Several had lost jobs and been unable to meet their financial obligations due to their addictions. David and Krish expressed intense sadness that they were repeating the cycle of failing to support their own children. They had been acutely aware as children that their fathers' addiction had caused great hardship for their families. Most spoke about how they lied and stole to get money to buy drugs. Many spoke about how they used gambling to get "fast cash" (Anna). Raj was one of a few who stated that he had "lost everything" and described the financial devastation that his addictions caused:

*I lost my house, my furniture, my shoes! I used to buy shoes for R1000; all brand name T shirts. I sold everything I had: CD, sound system. I sold my wife's jewellery. I had the best of everything: all gone, sold! The once (sic), I owed the merchant money. He came to my house, he went through my cupboards, he took my shoes, my leather jacket, ah, that was 2003. All that money that I spent, I could have made my house! I could have spent on my children.*

Raj had also lied to his wife about his earnings and hid money from her; he took loans from banks and stole from his employers to fund his different addictions. During the interview, he expressed strong feelings of regret and helplessness over his addiction, as well as feeling very angry at himself for all he had “thrown away”.

### **b. Education and Work**

Most participants said that they had dropped out of school due to their substance use and all reported that it had impacted negatively upon their school performance. Some had matriculated but had failed to achieve their full potential due to their developing addictions. Many of the younger addicts had never obtained formal employment and had relied upon stealing from their families, neighbours or shops to get money for drugs. Most of those who had had formal employment described how they could not perform their duties at work due to the effects of drug use. Jill was forced to moonlight as a prostitute from her well paid job as a graphic designer to afford her drugs. Paul and Raj had both been fired from many jobs in the hotel and trucking industries and they expressed remorse at having stolen from their employers, thus betraying the trust that had been placed in them.

### **c. Relationships**

Every participant spoke with great sadness about how their addictions had ruined relationships with parents, siblings, partners, children and friends. Many expressed great remorse at how they had lied to and exploited loved ones and questioned if they could ever regain their trust. Several expressed anger at how their families, particularly their parents, had abandoned them but were able to acknowledge that their behaviour had contributed to the

rejection once they were adults. These actions included broken promises, stealing and suicide or parasuicide attempts. Cassie noted wryly that even the Nigerians (her crack cocaine dealers) eventually rejected her because of her behaviour which had become progressively more irrational. Paul summarised his relationship with his father very poignantly and his words described the feelings and experiences expressed by most of the participants.

*I don't know if my parents will ever truly believe that I have changed. I get the feeling that they are waiting for me to throw it all away. My Dad said to me recently that he has never met anyone who has had so many opportunities and then messed them up over time.*

Paul's family were wary of trusting him again due to his many broken promises. He bitterly regretted having let his father down and sabotaging so many opportunities. This loss was experienced by many of the participants who had experienced conflict within the family. This was often because some members were more caring (or enabling) than others, and there were often serious disagreements within families as how best to respond to the addict's behaviour, as was described by Pria in Chapter 7.

#### **d. Criminal Acts**

Most of the participants had been involved in criminal activity, almost half had criminal convictions and many of them had spent time in prison. The offences ranged from housebreaking, theft (with or without a weapon), shoplifting, forgery and uttering, fraud, driving under the influence of alcohol, domestic violence, prostitution and counterfeiting money. A few of the participants had been involved with gangs and criminal syndicates and

described how drug dealing and use was an integral part of the lifestyle. In all cases, addiction was directly linked to their criminal activities, a fact that is recognised by the National Drug Master Plan, 2012–2016 (Department of Social Development, 2012 p. 42) as the “primary underlying cause of social ills”. Many of those who had been arrested for criminal activity described brutality, abuse and exploitation at the hands of the police who stole their money, demanded sexual favours and assaulted them. When Jill was abducted and raped, the police had refused to let her report the crime because she was a known prostitute. These experiences added to the already high trauma burden carried by the participants.

### **8.4.3 Psychological Aspects**

All of the participants experienced the impact of their addiction upon their relationship with themselves as their biggest loss and regret. There was recognition that they had destroyed themselves and their identity through their addiction; their sense of themselves as human beings capable of loving and having productive lives was severely compromised. Many acknowledged that they lacked proper coping skills to deal with life’s challenges, as “getting high” had previously been their solution to stress. Jill said that the methamphetamine had “stolen [her] soul”, while Sipho said that he did not know who he was and expressed despair at his feelings of inner emptiness. Many expressed profound feelings of hopelessness, a sense that their lives were directionless and that their addictions had destroyed their moral compass and their optimism for the future. Cassie summarised the feelings that the majority of participants expressed about the most damaging consequence of their addiction:

*I say I lost my soul. Material things you can always get again, but by the time I asked for help there was seven years of the crack addiction: the*

*shame and the guilt! There was no dignity! When you got up in the morning, if you bathed, you bathed, (shrugs) maybe you'd go to a guy's house and take a shower there. Just the losing of oneself! At the end I had nothing.*

Ben, upon reflecting how addiction had ravaged his life, said: "I have no real sense of who I am. I wear a mask most of the time. I don't know how I feel." Ben had been using drugs from the age of 13 and his self-image revolved around his role as a drug addict and a criminal. He believed that he had no direction in life and expressed a fear for the future, due to the profound loss that he experienced when not using drugs. Sam expressed similar feelings of emptiness and degradation from his years of drug use compounded by the injury to his face when he had been shot at the shebeen. He described his feelings: "I have a lot of pain, scars, like, when I look in the mirror I see the scars and I see that I'll never be the same like before. So much anger in me!" Sam's altered appearance from the gunshot wound to his lower jaw affected his self-image very profoundly and he expressed powerlessness over his anger at his chronic pain and unusual appearance.

Every single participant in the in-depth interviews expressed sadness for the damage that their addiction had caused themselves, their loved ones and other significant people, such as their employers. Their time in treatment had given them time to reflect upon these consequences and losses. The following section describes the participants' experiences of treatment and focuses on their previous admissions for in-patient treatment.

## **8.5 TREATMENT EXPERIENCES**

The participants discussed different issues regarding treatment which addressed objectives four and six from the qualitative perspective, as part of the mixed methods approach, and sought to establish the participants' previous experiences of treatment and outcomes. Their feedback is important and could be used to make adjustments to existing treatment programmes if necessary. The majority of participants in the in-depth interviews reported prior exposure to treatment, with the number of previous admissions ranging from one to eight. Positive experiences were that they believed that they had learned valuable information regarding drugs and their effects and skills such as stress management were addressed. Problems encountered during previous treatment admissions will now be described:

### **8.5.1 Using drugs or having illicit relationships in treatment**

Several of the participants said that they had used drugs and/or had sexual relationships with other in-patients when in treatment. Tony remarked that it was “not hard to beat the system” and he had used drugs during several of his previous admissions. Drug use and illicit relationships are both against the regulations and obviously sabotaged their efforts to obtain sobriety. Jill talked about her previous treatment:

*I've also been to X Rehabilitation Centre for 3 months. We used to smoke buttons[Mandrax] on the roof! (laughs) The guys used to call me and tell me that the stuff had come in. I don't know how it came in. Uh, I had sex with one of the girls there (laughs) . I never learned anything there. I was high a lot. I never stayed sober after I left.*



Jill had not engaged with the treatment programme and it was concerning to note that the staff either failed to notice or declined to take any action against her continued abuse of substances whilst in treatment. Staff at one of the treatment centres also raised this as an issue and were aware that in-patients were able to use drugs without fear of detection, as will be discussed more fully in section 8.6.4.

Anna reported flirting with several different men and having a physical relationship with one of them during her previous admission. These “rehab romances” are seen as a form of withdrawal mediation (Flores, 2004; Carnes et al., 2005).

David recalled how during his second admission to treatment he was introduced to a new drug, CAT. His family had sent him to an unregistered Church run institution in another province. There were no structured programmes offered and residents spent most of the day plotting how to obtain and use drugs. They also bartered clothing and gifts that they had received from their families for drugs seemingly without detection.

### **8.5.2 Poor motivation for treatment**

Most of those who had received treatment previously told me that they had “not been serious” about getting sober. They had felt that they had been coerced by family or employers to seek treatment. Ben described his previous experiences of treatment:

*I used to see rehab as a time to let my body recover so I could go out and use again. I've been in and out of rehabs. I'd often use rehab as time out*

*from my problems: drugs would become a problem, my family. I'd get involved with other residents and not focus on myself.*

Ben felt that he had used previous treatment as an opportunity to regain his physical health and strength, whilst also using the rehabilitation centre as a refuge from criminal syndicates that were threatening to kill him. Several participants described how they had had poor motivation when entering treatment. Joe described how he experienced competition within the centre to be the fittest, best looking person there, and this had distracted him from fully engaging in the treatment programme. Sagren expressed regret that he had not taken his first admission to treatment seriously, resulting in relapse and further negative experiences. These views and experiences highlighted barriers to effective engagement with the treatment process that need to be carefully monitored and addressed by the mental health care professionals. This issue was not specifically raised in my discussions with the professionals who they expressed awareness that many in-patients had ambivalent motivations when entering treatment. However, they believed that, with time in the centre, the person's level of self-motivation usually increases.

### **8.5.3 Treatment programmes not addressing trauma**

Mandy had experienced much trauma as a child and an adult. This had been partially addressed during her previous admission for treatment but she felt that she had not had enough time to work through her issues and had been unsure about her counsellor's ability to cope with her history. Mandy relapsed 18 months after completing her first in-patient treatment programme. She was interviewed when receiving in-patient treatment for the

second time and, speaking about her second admission, said: “My sexual past has affected me and I need to work on it. You know you have to be careful to trust a counsellor and to know that they would be able to cope with what you have to tell them.” She was aware of her need to address her sex addiction and childhood trauma, neither of which had been addressed during her first admission to in-patient treatment. She believed that these two issues had surfaced during her sobriety and she had relapsed in order to avoid facing the emotional pain that the memories evoked. She also was of the opinion that it was vital to have a trusting relationship with her counsellor, and needed to feel confident that this person would be able to cope with her disclosures regarding the brutal nature of her physical and sexual abuse as a child and her paradoxical feelings of being sexually aroused by her memories of incest. She said “I need to unpack all of this”.

Traditional treatment approaches are currently not looking at the full spectrum of addictions and neither is some of the research, as was discussed in Chapter 1. Many of the participants in this study seemed very surprised that they had problems with sex and gambling and thought that it was normal behaviour. This was as true for those that had received in-patient treatment previously as it was for treatment novices. Some of this attitude might be part of denial inherent in addiction, but it is also due to the current treatment approaches that focus almost exclusively upon substance abuse. Martin had been in a Children’s Home for five years but had never previously disclosed any information about being sexually abused by his uncle and being exposed to his mother’s prostitution: the in-depth interview was the first time that he had ever discussed these experiences. When I queried how he had never disclosed these traumas previously his response was simply “No one ever asked me before, ma’am”.

His experiences were echoed by a number of participants who remarked that they had never been asked questions like this before, regarding their family life or exposure to trauma. This included those with several previous exposures to in-patient treatment. Sagren remarked that he had not spoken in-depth about his family and the problems that had resulted in his being institutionalized. Lloyd felt that he had needed more time to process the betrayal and deception that he had experienced as a child regarding his mother's suicide. The participants believed that they had not been interviewed in a way that assisted them in seeing the links between their addictive lifestyle and behaviour patterns. The first phase of the research explored the views and experiences of professionals employed at the three centres and provided a useful way to enhance the understanding of the challenges facing treatment of addiction in Durban.

## **8.6 STAFF KNOWLEDGE AND CURRENT TREATMENT OF MULTIPLE ADDICTIONS AND ADDICTION INTERACTION DISORDER**

This chapter concludes with a discussion of the knowledge and current treatment of MA and AID by the professional staff employed at the three centres participating in the study. This phase was designed to meet objectives five and six which sought to establish how professional staff in drug rehabilitation centres understood, assessed and treated MA and AID and to make recommendations regarding treatment of addiction. I conducted groups with the professional staff before commencing the general survey and the in-depth interviews, but within the same six week time frame in which the research took place, in keeping with the concurrent embedded research design.

Eleven mental health care professionals participated in this research. Nine were female and two were male; seven of the professionals were social workers, of whom six were female.

Table 8.2 provides a summary of their qualifications and years of experience.

**Table 8.2 Profile of professionals who participated in the study**

Profession	Sex	Age	Education	Years' experience	Years' experience in addiction
Social Worker	F	71	B A Social Work (Honours)	18	5
Social Worker	M	62	B A Social Work (Honours)	30	30
Social Worker	F	44	Masters (Social Work)	23	8
Social Worker	F	23	4 year Social Work Degree	7 months	7 months
Social Worker	F	23	4 year Social Work Degree	7 months	7 months
Social Worker	F	39	4 year Social Work Degree	11	2
Social Worker	F	33	4 year Social Work Degree	10	2
Social Worker	F	40	4 year Social Work Degree	6	1
Counsellor	F	37	B A (Psychology)	7	7
Occupational Therapist	M	45	Degree + Honours	24	22
Professional Nurse	F	45	Diploma in general nursing	20	9

The social workers at each of the centres were responsible for conducting the intake interviews with patients upon admission and also for most of the counselling of the in-patients, family counselling and running of therapeutic groups. There was a wide range in experience amongst the participants, from seven months to 30 years. All were interested in the concepts of MA and AID and none of them had encountered Carnes' (2008) work regarding the four categories of addictions or AID previously.

### **8.6.1 Assessment of other addictions**

The discussions with the groups of service providers revealed that two of the centres do not screen their clients for other addictions. The third centre includes the question “Do you gamble?” on their intake form. If the client answers “yes”, it is addressed during the individual counselling sessions, specifically by exploring their gambling behaviour and advising the client to abstain from this addictive behaviour. The topic of cross addictions is also part of the general programme at this centre. None of the centres uses any formal assessment tools to assess any additional disorders. The one centre that offers treatment for disordered gambling admits patients who have already been diagnosed with this addiction by the referring agent.

As mentioned previously, most of the participants in the survey phase did not realise that they had an issue with sex or gambling addiction. Therefore, a significant number of patients would not have reported any other “excessive appetites” (Orford, 2000) and this would not have been addressed in the treatment process. A further obstacle to revealing other addictions may have been the shame and stigma attached to them, particularly with the sexual addiction. Some of the participants, e.g. Raj had said that they would not have had the courage to disclose their sexual addiction had they not completed the screening tests.

### **8.6.2 Addictions addressed by current treatment programmes**

The group discussions revealed that two centres covered the issue of cross addiction to other substances and behavioural disorders as part of their group education programmes, and specifically talked about sex and gambling. Cross addiction is also addressed during the

individual counselling programmes. The third centre addressed other addictions in the individual counselling sessions if the issue emerged, but not as part of the general treatment programme. As discussed earlier, this means that, because many patients either do not know that they have another addiction or are too ashamed to talk about it, these additional addictions are not identified. The mental health care professionals reported that none of the centres looked specifically at how the different addictions would interact with one another.

As stated, one of the treatment centres runs a specialised gambling programme including specific counselling to address the gambling, in addition to the general programme offered by the centre. This counselling is offered by professionals who have undergone specialised training to treat gambling disorders.

### **8.6.3 Opinions regarding Carnes' four categories of addiction and addiction interaction disorder**

All professionals in this sample found this to be interesting and useful concepts. Although none had been exposed to this information previously, they expressed the opinion that the different categories resonated with their understanding of addiction. They easily identified with addictions such as exercise, money (including compulsive spending, debting and hoarding) despite not having identified these as addictions during the discussion. They also identified with relationship addictions and all noted that they had noticed codependent relationships in families of addicts with whom they worked. They were interested in the concept of core feeling states and how these can form part of the addictive cycle.

None of the three institutions currently addresses AID. Those professionals who had been aware of their clients having addictions in addition to substances explained that they had not thought about how these addictions would combine. They had thought about each addiction as a discrete entity to be treated in addition to the addiction to substances. One professional commented that she was “working in the dark ages”. Several of the professionals from different institutions expressed the view that their treatment approach was very “old fashioned” and expressed frustration that they were not being kept updated with new ideas and concepts in addiction in order to render effective treatment. The discussion groups gave two reasons for their not being kept updated on new treatment approaches. Firstly, there was a lack of funding to purchase updated training material and secondly, some professionals believed that management did not see this as a priority.

All professionals who participated in the discussion expressed the view that it would be very helpful to include this information in their treatment of clients, both in individual counselling and in the group work programmes. Many expressed the view that they would need specialised training to implement a programme on MA and AID. One professional stated that time could pose a challenge, as their existing programme was already full.

#### **8.6.4 Other issues raised by the staff**

Most of the professionals expressed frustration at the limited funding received by their institution which affected service delivery in different ways. Building maintenance was a problem noted by some professionals, who felt that the buildings were not satisfactorily maintained with the result that their centre did not look very professional. The in-patient



participants in the study also complained to me about the state of disrepair of the facilities such as bathrooms and which led them to feel that that the facility was unhygienic. A few professionals from one particular centre said that they felt “embarrassed” to work at this centre due to the poor state of the building.

Others expressed concern that their centre did not budget for or provide drug testing kits. This was problematic as they had concerns that some in-patients could access and use drugs in the centre and it would be difficult to prove. This concern was confirmed by several participants in the in-depth interviews who described to me how they had used drugs, undetected, at various treatment centres. This is a very worrying issue when treating addiction as patients are vulnerable to relapse and need the safety of knowing that they are accountable to the staff and that there would be consequences if they use substances when in treatment. Others expressed concern that there were no funds to purchase journals, books or DVDs for their own training and for the patients’ education. The managers I spoke to were aware of the issues, but said that they were constrained by their limited budgets.

These concerns can be seen against research indicating that effectively functioning organisations are correlated with counsellors who work more effectively and have greater rapport with their clients, and for clients who evaluate the treatment more favourably (Bowles et al., 2011, as reviewed in Chapter 3). Discussions with staff made it clear that they were concerned about a lack of up-to-date resources, which impacted upon staff knowledge and skills. Although the professionals expressed concern regarding their lack of current knowledge, there was some degree of apathy about acquiring new knowledge and a sense of

hopelessness that things would not improve in the future. I did not ask the professionals if or how they evaluated their treatment outcomes or clients' perceptions of their treatment programmes, as this was not part of the research protocol. Based upon their research, Bowles et al. (2011, p. 316) noted with concern that when conducting their study, neither management nor treatment staff displayed a desire to change or adapt their programmes to new circumstances and they found this "worrying". They attributed this to an historical absence of minimum standards for rehabilitation centres and the fact that this sector was previously unregulated. They were concerned that the new initiatives, such as South African Community Epidemiology Network on Drug Use (SACENDU) and efforts to adopt evidence-based practice in the treatment of addiction would not be fully embraced unless staff and management at substance abuse treatment centres make this a priority.

The professionals that I interviewed expressed a desire to learn and update their knowledge. The management at the centres where I conducted my research were welcoming and cooperative, which was a positive indicator that both groups were committed to offering the best treatment to their patients. Bowles et al. (2011) noted that management rated the skills of their staff positively and both management and staff evaluated the organisational climate as favourable. They concluded that these were important factors to ensure effective treatment. An important issue that Bowles et al. (2011) did not address was the budgetary constraints experienced by the state-run, state-subsidised and privately funded centres which have an important impact on the quality of care that the institution is able to offer. This has many ramifications including maintenance of the facility, access to training material and retention of staff. In fact, staff and management expressed concern that it was very challenging to raise

funds or motivate for funding for substance abuse, due to public prejudice against addiction, which is often seen as a self-inflicted condition and is, hence, less attractive for donors .

## **8.7 CHAPTER SUMMARY**

This chapter presented a discussion and analysis of the experiences of AID as described by the 25 participants selected from the general survey participants. It was clear that AID was as relevant a concept for individuals with a primary diagnosis of addiction to substances as for sex addicts with whom the concept was developed (Carnes et al., 2005). Intensification (fusion) was the pattern most commonly experienced by the participants, followed by disinhibition, then withdrawal mediation and numbing. There were some sex differences observed, and the relationship between trauma and the numbing pattern is an important issue to be addressed in treatment. The participants' understanding of the consequences of their addictions and their experiences of treatment were presented. The chapter concluded with an exploration of how the mental health care professionals understood and treated addiction to get an accurate picture of current assessment and treatment approaches being offered to people requiring in-patient addiction treatment. It became clear that most of the professionals believed that their knowledge about addiction was outdated and this concerned them. Budgetary constraints were listed as an important challenge as it hampered training opportunities for the staff and it also, at some of the institutions, affected patient care in terms of the facilities available and treatment offered. The final chapter summarises key findings and makes recommendations regarding assessment and treatment, future research and implications of the research for policy.

## **CHAPTER 9**

### **CONCLUSION**

#### **9.1 INTRODUCTION**

Chapter One discussed the context of the research problem, listed the questions posed and specified the aims and objectives of the study. This final chapter assesses whether these goals were accomplished and begins by summarising the research process and then addresses the limitations of the study. The main findings of the study are presented in terms the six objectives which guided it, followed by a discussion regarding the suitability of the research method selected. The chapter concludes with recommendations regarding assessment, treatment and training of professionals working with addiction and examines implications for future research and policies on addiction.

#### **9.2 SUMMARY OF THE RESEARCH PROCESS**

The problem statement that informed this study, as outlined in Chapter 1, was based upon the awareness that current treatments of addiction appear to be ineffective and there is a need to incorporate newer research findings into treatment programmes, one of which is the proposed existence of addiction interaction disorder (Carnes et al., 2005). The research question upon which this study was based was twofold: to explore whether people undergoing treatment for substance use disorders at three in-patient treatment facilities had other addictions and if so, was there any interaction between these addictions? The second part of the question was to establish if the treatment programmes appropriately addressed and managed MA and AID.

The theoretical framework that guided this study was the biopsychosocial framework which views addiction in an holistic way, mindful of the illness' complexities. This was adopted due to its' flexibility and its' nonlinear view of complex issues, in contrast to the dominant biomedical model which has an overly narrow focus upon individual pathology.

Chapters 2 and 3 reviewed local and international literature and research to define key concepts of and to contextualise addiction. The review discussed the definitions and characteristics of this illness and important antecedents, particularly family issues and trauma. The literature showed a clear relationship between trauma as both a cause and consequence of addiction. Chapter 3 discussed specific addictions, AID and treatment of addiction. Several studies had highlighted the presence of multiple addictions and the strong likelihood that people presenting with treatment for one addiction had other, often unacknowledged, addictions that are part of their illness. An important theme that emerged from the literature review was that addiction needs to be seen from a more holistic perspective and that research findings are not being incorporated into current treatment programmes. More concerning was that updating treatment programmes in South African drug treatment centres did not seem to be an urgent priority for management (Bowles et al., 2011).

The research methodology chosen for this study was the mixed methods approach and the research design was the concurrent embedded strategy (Creswell, 2009). Chapter 4 discussed the rationale for the research methodology employed in the study. Addiction is a highly complex topic, and the mixed methods approach was chosen as it enabled information to be

gathered that answered the research questions from both the quantitative “how much and how many?” perspective as well as the “what does it mean?” qualitative perspective. Mixed methods is deemed to be a highly suitable methodology in the field of health sciences (Dures et al., 2011) and trauma research (Creswell & Zhang, 2009) because it offers flexibility in the research design to best answer the research questions.

Chapter 5 discussed the results obtained from the survey of 123 addicts, with a focus on the outcomes from the sex and gambling assessments. This phase of the research provided a profile of inpatients undergoing treatment for addiction to substances and also answered the question about the prevalence of multiple addictions very decisively: 54% of the participants had at least one of the addictions and 24% of the sample was addicted to both sex and gambling. Other important findings were the high prevalence rate of poly-substance abuse, which is acknowledged as an important issue in the treatment of addiction (Dada et al., 2012) and a very high rate of child sexual abuse reported by the female participants.

Chapters 6, 7 and 8 analysed the contents of the in-depth interviews with the 25 participants drawn from the survey, due to their having of one or both additional addictions and also selected to obtain a spread of characteristics in terms of gender, race, sexual orientation, educational level, substance use and treatment histories. Chapter 6 explored how the participants had understood the development of their addictions and focussed upon family and trauma as important factors. The dimensions listed by Olson’s Circumplex Model of Family and Marital Functioning (1993, 2011) were used to guide the discussion on family dynamics. It also explored the participants’ experiences of addiction to substances, which

was the presenting addiction for which they had been admitted. Chapter 7 analysed the participants' experiences of MA, exploring the participants' experiences of the process, relationship and core affect state addictions. Chapter 8 discussed their experiences of AID, their beliefs about the consequences of their addiction and their treatment experiences. All of the participants had experienced addiction interaction and they examined the losses and negative consequences wrought by their addictions on biological, psychological and social levels in their lives. They raised many issues regarding previous treatment which were, to some extent, echoed by the professionals working with addiction.

### **9.3 LIMITATIONS OF THE STUDY**

This study had several limitations and challenges which arose from three important issues: the exploratory nature of the study, the research methods selected, and the stigma attached to addiction which makes it a challenging topic to research. These issues had the potential to affect the validity and reliability of the findings, and mindfulness of these challenges was important to enhance the integrity of the research outcome.

- Due to its exploratory nature, the research process was confined to three in-patient facilities in the Durban metropolitan area of South Africa. It did not include individuals receiving out-patient treatment or attending self-help groups, such as AA. The SACENDU research into drug trends in South Africa utilised six in-patient sites in KZN which would have yielded a larger pool from which to draw participants. I attempted to overcome potential sampling bias by selecting three sites for the study which offered addiction treatment to a wider spectrum of participants. There were

fewer Black African participants in my research (35% out of n=123) than if the sample had reflected the demographic composition of KZN, where 86.8% of the population is recorded as being Black African (Statistics South Africa, 2012 Census, p. 21). The issue of under-representation of Black African patients at facilities is acknowledged as a challenge in reaching people requiring treatment (Dada et al., 2012; Parry et al., 2009), and was not unique to my study.

- The research methods selected could also have affected the validity and reliability of the findings. The rationale for the research design was outlined in Chapter 4, and a mixed methods concurrent embedded strategy (Creswell, 2009) was utilised. The qualitative methodologies of in-depth interviews, discussion groups and thematic analysis were primary in this study and relied upon my interpretation of the data collected. Steps were taken to increase the validity of the findings (see Chapter 4, Section 4). Data were collected from different sources to allow for cross-checking and my results were discussed at regular meetings with my supervisors. Further steps to enhance validity and reliability are discussed below.
- The stigma attached to addiction could have resulted in people not being honest in their responses (Bradshaw, 2005; Herring, 2011; Opitz et al., 2009). There are issues of the social desirability effect, where participants could have ‘sanitised’ their responses to make them less shameful or offensive. Conversely, some participants could have wanted to impress or shock me with their responses. The issue of honesty and hence validity in this study is further complicated by the existence of unconscious psychological defence mechanisms that protect the addict from having to accept the true reality of his or her illness (McCauley, 2009; Miller et al., 2011). Many of the



participants in the research were receiving treatment for the first time and most participants had been in the treatment facility for less than one month, so their own insight could have been limited. This is acknowledged as a challenge in addiction research by Carnes et al. (2010) and Opitz et al. (2009), who note that people frequently under-report the extent of addictive behaviours in the early phases of treatment, due to denial, shame, rationalisation and minimisation of behaviours. I attempted to overcome this potential limitation in several ways.

Firstly, I conducted all of the research myself, so there was uniformity in data collection. I was available during the survey phase to answer or clarify any questions in the self-administered questionnaires for the participants. Most of the research was conducted in English and where a social work colleague assisted with interpretation into isiZulu, which was only necessary for two of the participants, I was present to clarify any questions that she or those two participants had. I have had 30 years of clinical experience as a social worker and attempted to develop rapport with the participants, particularly the 25 people who were interviewed during the in-depth phase interview of the research process.

Another strategy used to increase the validity of the findings was the triangulation used in the data collection. The data collected were obtained from different sources, viz. the survey, the in-depth interviews, the participants' medical records and the discussion with the staff about treatment of MA and AID. I observed when conducting the in-depth interviews with the 25 participants that there was consistency between the information given to me in their survey forms and during the in-depth interviews. Participation in all

phases of the research was voluntary and most people approached agreed to participate in the research. Several of the participants, particularly those who participated in the in-depth interviews, reported that they had found the process very enlightening and it had helped them to better understand their addiction.

A further strategy employed to increase the validity and reliability of the findings was the careful attention paid to sampling, as discussed in Chapter 4, Section 4.3.4. The sampling methods varied between the three phases due to the mixed methods design of the study. For the quantitative phase, the survey, all in-patients who had been admitted during a specific six week time frame were approached to participate in the research (with the exception of females at one institution, for reasons previously explained). This approach attempted to ensure that there was no bias in the selection of subjects. The participants for the qualitative phases were selected via purposive sampling, based on the information provided in the quantitative survey. The 25 participants selected for in-depth interviews were chosen to provide rich data to understand the complex issues of MA and AID. The professional staff, who participated in the first phase, was also purposively selected to answer the research questions about knowledge regarding MA and AID and current treatment programmes.

In short, every effort was made to ensure that the data collected yielded information that answered the research questions in a manner that was reliable and valid. In the following section I summarise, highlight and discuss the key findings that emerged from this study.

## **9.4 MAIN FINDINGS OF THE STUDY**

The research problem that I formulated in Chapter 1, Section 3, was to seek ways of improving the assessment and treatment of addiction. I wanted to investigate the phenomena of MA and AID to understand if they were being experienced by in-patients addicted to substances in Durban, South Africa, as these factors have been acknowledged as compromising treatment efficacy and outcome (Carnes, 2008). The research problem generated three aims which sought to establish if MA and AID were being experienced by inpatients addicted to substances, and, if so, the extent of these two phenomena and thirdly, if treatment programmes were addressing these issues. The research aims generated six specific objectives (See Section 1.6) which will form the framework for the discussion of the main findings of the study:

### **9.4.1 Profile of in-patients**

#### **Research objective 1**

*To investigate the profile of in-patients with substance use disorders in Durban, and to establish if they have other addictions, specifically, sex and gambling addictions.*

In the survey phase, presented in Chapter 5, key findings regarding the profile of the 123 participants were that most of the participants, both males and females, fell into the 21-29 year age group, with an age range between 18 to 65 years. Males comprised 77% of the sample and, in terms of racial profiles, 35% of participants were African, 12% were Coloured, 20% were Indian and 33% were White. The majority of participants had completed primary school and part of high school. Most of them, 79%, had been unemployed

for over one year and 16% of the sample had never been formally employed. Three quarters of the survey participants had never been married, although many of them reported that they had a partner and 55% reported that they did not have children. Most of this sample, 86%, reported a history of poly-substance abuse, with three different drugs being the most commonly reported number of drugs of abuse. This rate is higher than rates found in the United States by Sussman et al. (2008) and in South Africa by Dada et al. (2012). There were differences in methods of data collection between the previous local studies and my research, which have been discussed in Chapter 5. section 5.6. The three most commonly reported drugs of abuse were dagga (76%), alcohol (70%) and Whoonga (44%). Of the 123 participants in the survey phase of the research, 54% had either sex and/or gambling addictions as diagnosed by the screening tests used to detect these addictions, and of this group, 24% tested positive for both addictions. The rate in this study was not as high a co-addiction rate as that found by Carnes (1991) where 83% of sex addicts had other addictions, most commonly chemical addictions (43%). These addicts (n=932) were diagnosed with sex addiction and they had been in recovery for three or more years when they participated in the research programme, making their contributions more insightful (Carnes, 1991).

#### **9.4.2 Causation of addiction**

##### **Research objective 2**

*To investigate the role of family dynamics and trauma in the development of multiple addictions and addiction interaction disorder amongst substance users.*

Questions relating to the development of addiction were explored in the in-depth interviews and were presented in Chapter 6. The role of the family was the first topic discussed (Section 6.2) and most participants reported some degree of pathology in their family of origin, some of whom reported extremely disturbed family relationships and experiences. These incorporated physical, sexual and emotional abuse, abandonment by parents and, in some cases, removal from the family due to these factors. Many of the participants grew up in families with dysfunctional structures and boundaries. In most cases, the family's rules and roles were chaotic and ill-defined, but some participants grew up in very rigid families, where the rules were too inflexible, resulting in rebellion. Both extremes of family functioning had the same end result: when they reached adolescence, the participants had no sound rules or loving relationships to guide and protect them. It became clear in the in-depth interviews that when the participants began using drugs, their families either did not notice this or that efforts made to control such behaviour were brutal and/or ineffectual.

Most of the participants had other addicts in their families of origin: two thirds of the general survey participants and most of the participants in the in-depth interviews (17 out of 25) reported having family members, most commonly their fathers, with addiction problems. The participants often remarked that their parents could not discipline them because they were themselves addicts. Most of the families were rooted in a broader community where drug use was wide-spread, poverty and unemployment were endemic and these structural factors played an enormous role in contributing to the development of addiction and they require further attention in future research.

The second topic relating to the development of addiction was the role of trauma (Section 6.3) and most of the women and several of the men reported extensive childhood trauma. These experiences included incest, childhood sexual abuse by other trusted adults, rape, physical abuse and loss of or abandonment by significant caregivers, all of which constituted developmental trauma (Sar, 2010; Schmid et al., 2013). This study used a concurrent embedded mixed methods research design (Creswell, 2009) and both the survey and in-depth interviews yielded information regarding the trauma of childhood sexual abuse. More than half of the women and 8% of the men reported childhood sexual abuse in the survey, which is acknowledged as a severe form of trauma (Schmid et al., 2013). The in-depth interviews confirmed and amplified this trend with most of the women and a few of the men reporting childhood sexual abuse. Many of the participants in the in-depth interviews were able to identify that they began using drugs and engaging in other behaviours, particularly masturbation, as a way of coping with trauma. This experience was more common amongst the female participants, but several of the men also reported severe trauma prior to developing addiction. They said that the drugs or behaviours helped them to forget the painful feelings and memories. This supports the findings by Becker et al. (2012) who asserted that people who begin using drugs to cope with trauma (as opposed to beginning use for the pleasurable effects), are at an increased risk for developing addiction due to the negative effects of trauma on their neurobiological functioning.

Many participants reported trauma in adulthood and in the period after they had begun abusing substances. They reported rapes or attacks either when under the influence of substances, or when obtaining drugs. This highlights the complex relationship between

addiction and trauma. It is not a simple cause–effect relationship, but, once engaging in addictive behaviour, the person is vulnerable to further trauma (C Johnson et al., 2010). Despite the high rates of trauma exposure, only one participant, a male, had received a formal diagnosis of PTSD. Further, it was clear from the interviews that many of the participants had features of PTSD (as per DSM-IV-T-R) with symptoms ranging from intrusive recollections of the trauma, nightmares, efforts to avoid remembering the trauma et cetera (Sadock et al., 2007). Only one participant had received formal counselling that addressed her trauma.

### **9.4.3 Experiences of multiple addictions and addiction interaction disorder**

#### **Research objective 3**

*To explore experiences of multiple addictions and addiction interaction disorder amongst participants assessed as having a gambling and/ or sex addiction.*

The survey phase of the research, presented in Chapter 5, found that 54% of the participants had either a sex or gambling addiction in addition to their addiction to substances and 24% had both of these addictions. The in-depth interviews found that most of the participants had experienced other process addictions (exercise, money and food), relationship addictions (most commonly codependency and trauma bonding) and core feeling states (most commonly rage and shame), which was presented in Chapter 7. None of the process addictions had been screened for nor were being treated by the current in-patient programme in which they were currently enrolled and would, in all likelihood, have gone undetected and unnoticed whilst receiving treatment for substance use.

An essential fact to remember is that none of the participants admitted for treatment for their substance use had had any other of their addictions diagnosed by the treatment facility in which they were receiving treatment. All had been screened by the multidisciplinary team at the facility in accordance with their standard assessment and admission procedures. Many of the participants themselves were surprised when completing the questionnaires, and told me that they thought that their other behaviours were normal or, in the case of gambling, a harmless diversion from their substance addictions. The in-depth interviews however revealed how these other addictions had complemented and amplified the substance abuse and shared the same features, such as powerless and leading to negative consequences.

None of the participants in the in-depth interviews had previously been introduced to the concept of AID. It was abundantly clear from their accounts that many of the addictions had developed simultaneously and had fuelled one another in a reciprocal manner. Patterns of AID were clearly evident in their histories and they recognised, as the interviews progressed, that their addictions were interrelated. Intensification and fusion of addictions were the two most commonly reported pattern of AID both in this study and in the research conducted on sex addicts by Carnes et al. (2005). Many of the participants presented with partial or full fusion of their addictions. Other patterns commonly identified were disinhibition, particularly in relation to substances, compulsive use of pornography and prostitutes, and masking, where the drug use covered up substantial sexual acting out; the key to understanding masking is that it hides a more shameful addiction. Withdrawal mediation was another pattern reported by half of the participants, and it was a problem in treatment centres and many participants reported this. Some developed eating disorders when in treatment while others began



codependent or intense romantic relationships or switched to overeating or increased their cigarette smoking to cope with withdrawal from substances.

#### **9.4.4 Previous treatment experiences amongst substance users**

##### **Research objective 4**

*To establish previous treatment exposure and its outcome amongst substance users*

In this study 44% of the participants in the general survey and the majority of the participants in the in-depth interviews had received previous in-patient treatment for their addiction to substances. Unfortunately, they reported a poor response to treatment and challenges that they had encountered whilst in treatment were discussed in Chapter 5, Section 5 for the survey and Chapter 8, Section 5 for the in-depth interview participants. The rates of relapse in both groups were very high, with 85% of the general survey participants (n=123) reporting a relapse within the first week to month after leaving treatment. Sobriety in excess of one year was only attained by 15% of the general sample and was most commonly reported after the second treatment.

None of the participants had been assessed for any addictions other than substances. Many reported that they had learned about the effects of drugs during their current treatment, and a few had come to realise that they had problems with drugs in addition to those for which they had sought treatment, for example, using crack cocaine but learning that their alcohol use was also problematic. This type of education seemed to have been done effectively by the treatment centres.

Several participants reported being told about or experimenting with new drugs whilst admitted for treatment, whilst others developed eating disorders or began romantic relationships. This raises issues about monitoring of substance use and behaviour by the treatment centre's management and staff.

All of the participants readily recognised the negative consequences that the addictions had had upon their lives. These effects encompassed all of the biopsychosocial elements and ranged from major health problems, psychiatric disturbances, failed, damaged family and other relationships, and loss of time, as well as educational and employment opportunities. Knowledge of future negative consequences of relapse is an important element in relapse prevention programmes (Alemi et al., 1995). The centres appeared to cover important aspects regarding substance addiction very thoroughly and faced time constraints which limited the amount of material that could have been covered during the treatment programme. Information that appeared to have been covered effectively included the effects of and side effects (harm) caused by drugs and stress management techniques. These issues were discussed in the group work programmes run by social workers and other mental health care professionals, and during the individual and family work conducted by these professionals.

The treatment centres were aware of co-occurring psychiatric conditions such as anxiety and depression, and in-patients presenting with those problems were screened and treated for these conditions, which enhanced the efficacy of the treatment that they are offering.

#### **9.4.5 Views of professionals treating addiction**

##### **Research objective 5**

*To establish how professional staff employed at in-patient rehabilitation centres understand and currently assess and treat multiple addictions and addiction interaction disorder*

The views of the professional staff were presented in Chapter 8, Section 6. All of the professional staff identified several of the process addictions, but none of the centres conducted any formal assessment to assess for these. One professional identified codependent relationships, but no other relationship addictions were identified. Although one centre was accredited to treat disordered gambling, not all of the staff employed there had undergone specialised training to treat this addiction. None of the professionals in this study had received any training regarding addictions other than substances and most felt that they needed access to updated information on addiction.

The staff from two centres stated that they discussed behavioural addictions when educating in-patients about cross addiction, both in groups and in individual counselling sessions, but none of the professionals were aware of the concept of AID. Clearly the issue of MA is not being addressed adequately at the centres. Most of the staff expressed frustration at the budgetary constraints that affected their institutions. This has impacted upon training and development of staff and several expressed concern that their knowledge and treatment approaches were outdated.

Despite awareness regarding different addictions, none of the programmes at the three centres formally assessed for these. As pointed out by Carnes et al. (2005), failure to address the full spectrum of the person's addictive illness is a fundamental reason for the poor response rates to treatment. Unfortunately, given that other addictions were neither being screened nor assessed, they would only be addressed and discussed with the patient if he or she either presented with issues regarding that addiction (such as being seen to be bulimic), or if the patient disclosed this addiction during treatment. Relying upon patient disclosure is problematic in two ways. Firstly, as was seen in this study, many patients did not realise that they had an addiction to sex or gambling. The second problem was that, even if a patient was aware that they had a problem, it is likely that they could have been too embarrassed or ashamed to discuss this issue whilst in treatment. This is particularly relevant for sex addiction which is highly stigmatised (Herring, 2011). As we have seen from AID, if the addict was unaware that their gambling, sexual behaviour, spending, relationship patterns and emotional states are also part of their addiction, they are at greater risk of replacing their drug use with these other addictive coping strategies.

#### **9.4.6 Preliminary recommendations regarding treatment**

##### **Research objective 6**

*To make recommendations regarding treatment of addiction*

These will be discussed in the following section, 9.5 when recommendations emanating from this study are made.

In summary, the objectives formulated at the outset of the research were attained by this study.

## **9.5 SUITABILITY OF THE RESEARCH METHOD**

The concurrent embedded mixed methods design was highly appropriate in enabling me to answer the research problem and meet its aims and objectives. This research design offered the flexibility that enabled the study to gather information that answered “how many?” and “how strong?” (quantitative) and “what and how?” (qualitative) questions in an effort to explore the research problem (Dures et al., 2011, p. 333). Further, the data from the two approaches complemented one another, and allowed for data to be cross-checked, for example regarding drug history, exposure to trauma and treatment experiences. The quantitative data provided essential information regarding the prevalence of the participants’ drug use, gambling and sex addictions and treatment exposure. The qualitative data deepened the understanding of the above factors, in addition to highlighting important factors about how the addictions had developed and been experienced. The purpose of research, particularly in the social sciences, is to improve our understanding of complex issues and to yield information on how to improve practice. The findings in this study lend themselves to certain recommendations regarding improved assessment and treatment of addiction and training of professional staff, which will now be discussed.

## **9.6 RECOMMENDATIONS OF THE STUDY**

The research findings have highlighted important gaps in assessment, treatment and training of professional staff and recommendations regarding changes to current approaches are now presented, after which the issues of further research into and policy on addiction are addressed.

### **9.6.1 Implications for assessment, treatment and staff training**

This section outlines recommendations regarding the assessment and treatment of addiction. Schneider (2005, p. 75) states that “addiction is addiction is addiction”. The treatment centres in this study seemed to utilise an outdated and narrow focus upon substances to the exclusion of the rest of the addiction spectrum.

#### ***a. Recommendations regarding assessment***

Assessment is an on-going part of addiction treatment, not a once-off event and should be refined as a continuous process that becomes more accurate as the person’s defences subside, and they gain a deeper understanding of their illness. Specific recommendations regarding assessment are as follows:

- Given the high prevalence of sex and gambling addictions found in this study and in international research (Carnes, 2008; Sussman et al., 2011), in-patients should be routinely screened for these two process addictions during the initial assessment phase.
- Assessment should also include an enquiry regarding other process addictions, pathological relationships and core feeling states. The “neural pathway interview”,

(described in Chapter 3, Section 7, Carnes et al., 2005, p. 112) is a very effective tool to access the full spectrum of addictive feelings and behaviours.

- The professional staff need to observe closely the in-patients' behaviours, which should form part of the on-going assessment and treatment planning. This would involve monitoring the formation of romantic attachments, the emergence of eating disorders or any other type of compulsive behaviours, such as exercise as these are all part of the addiction spectrum.
- It is imperative that patients are tested regularly for drug use to deter any illicit drug use when in treatment.
- Assessment should include a thorough exploration of previous exposures to trauma and possible symptoms of PTSD or other trauma sequelae. The treatment centres should then have the correct protocols for a psychiatric assessment and appropriate intervention for trauma-related problems.

#### ***b. Recommendations regarding treatment***

Based upon the findings of this study, the following recommendations regarding treatment of addiction can be made:

- Information on the neurobiology of addiction should be included in treatment (Carnes, 2008; Erikson, 2009). It is an important aspect of any treatment programme as this improved understanding of how the brain is affected by substance and process addictions helps to remove the stigma and guilt experienced by mental health care users which, in turn, can have a negative impact on treatment (McCauley, 2009). Only one of the three centres in the study covered this topic and very few of the staff

at the other two centres were aware of it. By their own admission, many professionals were aware that their knowledge about addiction was scanty and out-dated.

- The information given during treatment should include assessments of and discussions about the full spectrum of addictions, broadening its scope from the narrow focus upon substances. Leading on from the input on MA, information and discussions about AID are essential to include in both individual and group work interventions with in-patients and their families. AID was a concept that both the participants and professionals in this study readily accepted and identified it as helping them to enhance their understanding of addiction. These changes would result in a more holistic programme.
- Given the high rates of relapse experienced by the participants, a greater emphasis should be placed upon after-care and involvement of the family in the treatment programme.

***c. Recommendations regarding training of professional staff treating addiction:***

None of the changes recommended above could take place without management and staff recognising the need to update their treatment and having the budget with which to implement changes. Based on the research findings, some recommendations can be made regarding the training of professional staff treating addiction:

- Staff should be given information on the neurobiology of addiction, the emerging view of addiction as a syndrome (Shaffer et al., 2004) and gaining greater knowledge on the different manifestations of addiction.



- Training in the use of the tools to assess for disordered gambling and sex addiction would empower them in assessing these addictions.
- Trauma emerged as an important issue in this study but it seemed to have been under-diagnosed and not specifically treated in the current programmes. Trauma is a specialised field in mental health and staff need to be trained on the assessment and treatment of trauma.
- Finally, I would recommend incorporation of knowledge about MA and AID be introduced in the training of mental health care professionals. Specifically, in relation to my own profession, the social work curriculum should include information on addiction, and how to assess and treat its many manifestations.

Writing nearly 20 years ago, Harrison commented upon the disconnection between research and the implementation of its findings by observing: “thus far, social work research has led to fewer improvements in practice than one might have hoped for” (1994, p. 409). Tragically, the same seems to be as true today. We are doing our clients a grave disservice by failing to integrate new knowledge into our practice as well as violating our codes of ethics by failing to implement this knowledge to improve the services we offer our clients, their families and the broader community.

### **9.6.2 Implications for future research**

This study found that most patients admitted for treatment of substance addiction had other substantial addictions which were neither diagnosed nor treated due to lack of knowledge by

professional staff and lack of formal assessments for other addictions. The findings of my study point to the need for further research in several areas:

- To conduct research at other institutions, including in- and out-patient facilities, in KZN and throughout South Africa, to determine if inpatients at these other centres are also have MA.
- If MA are found in these new studies, research could also determine whether those participants are experiencing patterns of AID and which are more prevalent.
- To conduct research with participants who have a different primary addiction, such as gambling or sex addiction, to assess if they also experience MA and AID. Research could investigate if there are differences in the patterns of AID compared to people whose primary addiction is to substances. There is an urgent need for research to be conducted in South Africa to enable us to generate our own knowledge and, also, to be able to adapt assessment and treatment approaches to make them more sensitive and relevant to South Africans needing treatment for addiction.
- To conduct more detailed research that explores the relationship between trauma and addiction, focusing on trauma as both the antecedent and consequence of addiction. This would hopefully assist with refining the assessment and treatment of trauma and explore whether addicts with trauma have specific treatment needs different from the current practices in treating trauma. It could also assess if there need to be specific modifications when treating addicts versus non- addicts.

### **9.6.3 Implications for policy**

Substance abuse or addiction is the most obvious manifestation of a far greater and more substantive malaise; again quoting Schneider (2005, p. 75), policy needs to recognise that “addiction is addiction is addiction”. The evidence is clear that process addictions are capable of modifying the brain’s chemistry and that addiction is “the quintessential biobehavioural disorder” (Leshner, 2001, p. 75). Future research may find similar modifications due to relationship and core feeling state addictions. Addiction needs to be seen in a more holistic manner and the new research and perspectives need to be incorporated into policies regarding its prevention and treatment. The research findings from this study have the following implications for policy:

- It was during adolescence that most participants began using mood altering substances and engaging in high-risk behaviours. There are currently programmes directed towards the prevention or delay of onset of the drug (including alcohol and cigarette) debut. These need to be expanded to include awareness about the potentially addictive properties of gambling, pornography and other excessive or compulsive behaviours including other sexual behaviours, internet and gaming, excessive exercise and codependency.
- There needs to be increased public awareness about the different manifestations of addiction. There are excellent public forums through Faith Based Organisations and Community Based Organisations which run campaigns to combat drug use. It is recommended that their scope and focus be broadened to include a wider range of addictions and that the appropriate policy and mandates are expanded to accommodate this.

- A specific concern to emerge from this research was the tolerance of gambling games by teachers and school management at certain primary and high schools. For many of the participants who were addicted to gambling in my study, this was often their first and gateway addictive behaviour that they experienced, even before experimentation with drugs. The Department of Education needs to monitor and perhaps conduct its own research into the prevalence of gambling at schools.
- Norms for treatment programmes run by organisations registered with the Department of Social Development be changed to accommodate the full spectrum of addictions, moving away from the narrow focus on chemical addictions. This would have implications for assessment and treatment of patients and would require training of professional staff.
- The National Drug Master Plans for the periods 2006–2011 and 2012–2016 (Department of social Development, 2006, 2012) are well written and comprehensive documents. However, their focus is too narrow given what is known about the nature of addiction. I would recommend that it be re-named, and re-framed as the “National Plan to Combat Addiction” which would acknowledge the complexity and different manifestations of this challenging problem.
- Social policy should also seek to address the structural factors that give rise to the environmental risk factors contributing to addiction, especially poverty, unemployment and other broad-based developmental initiatives. The government needs to take the lead, not only in the development of such policies, but also to ensure that these policies translate into effective practice.

## **9.7 CONCLUSION**

This study is the first to be conducted in South Africa that addressed the issues of multiple addictions and addiction interaction disorder. This chapter reviewed the overall research process, discussed potential limitations and evaluated if the research aims and objectives formulated at the outset of this undertaking had been met. It then made recommendations regarding the assessment and treatment of addiction, training of professional staff, as well as highlighting implications for future research on this topic and changes to policy on addiction that could make both prevention and treatment more effective.

Addiction is a problem with many manifestations and its effects are felt at all levels, from the biological, to the psychological and the social and effective treatment is essential to improve the mental health of individuals, their families and the broader community. It is hoped that this research will contribute to a better understanding of the phenomena of multiple addictions and addiction interaction disorder and that it has yielded important information concerning the profiles of South African addicts to improve the management of an illness that is “cunning, baffling and powerful” (Alcoholics Anonymous, 2001 p. 58-59).

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# APPENDICES

- APPENDIX 1: Ethical clearance form
- APPENDIX 2: Letters requesting consent
- APPENDIX 3: Interview guide for discussion groups
- APPENDIX 4: Self-administered questionnaire for in-patients
- APPENDIX 5: Problem Gambling Screening Inventory (PGSI)
- APPENDIX 6: Revised Sex Addiction Screening Test (R-SAST)
- APPENDIX 7: Interview schedule for in-depth interviews
- APPENDIX 8: Biographies of the 25 participants from the in-depth interviews



# APPENDIX 1

Ethical clearance form

# APPENDIX 2

Letters requesting consent

## **2.1 Letter to Service Provider for consent to conduct research in their institution**

Dear Service Provider,

Addiction is known to be a major issue affecting the lives of many people in South Africa. Studies overseas have shown that many people who have one addiction are very likely to have other addictions. If these other addictions are not identified and treated, it places the person at greater risk of relapse. There is no research that has been done locally to investigate this issue. I am hoping, through this research, to establish if multiple addictions and addiction interaction are important issues locally. This, in turn, should lead to a better understanding about addiction and the best treatments for this illness.

I am enrolled in a Doctoral Study Programme on the topic: ADDICTION INTERACTION DISORDER at the University of Kwa Zulu Natal, Department of Social Work and Community Development. I am conducting research into persons diagnosed with substance dependence, as well as finding out what professionals working in the field treating in patients with addiction think about these concepts.

We therefore ask your permission for your inpatients and professional staff to participate in this research process. This will involve the administration a self administered questionnaire to a large group of inpatients. A smaller number of inpatients will then be selected for an in-depth interview. In addition to interaction with the patients, I am also requesting their consent for me to access their treatment files as part of the research. I would also like to interview the professional staff in a workshop on Addiction Interaction Disorder and a discussion group on this issue. The interviews and discussion group will be audio taped. The participants' identities will all be kept confidential and participation is voluntary. The time required by the participant will vary according to the research method. The participants are permitted to withdraw at any stage. The participants will not be paid for their participation in the research. The name of your institution will also be kept confidential and not disclosed in the research write up.

You may contact me, Helen Keen at 083 4433626 or my supervisors, Dr Reshma Sathiparsad at 031 2602430 (work) or Professor Myra Taylor on 031 2604499, should you have questions about the research. You may contact the Research Office at 031 2603587 if you have questions about your rights as a research subject.

**Confidentiality:** Every effort will be made to keep personal information confidential. Absolute confidentiality cannot be guaranteed. Personal information may be disclosed if required by law.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the Research Ethics Committee.

Yours sincerely

**Helen Keen**

**Social Worker**

**APPENDIX 2.2: Letters requesting consent to conduct research at the institution, explaining the research protocol in detail.**

The Director  
XXXX  
DURBAN.

1 February 2012.

Dear Sir / Madam,

**Overview of research project to be undertaken by Helen Keen.**

Thank you for your assistance with this research project. Permission to conduct the research has been obtained from *THE RELEVANT AUTHORITY*. The proposal and ethics application have been approved by the Higher Degrees Committee at the University of Kwa Zulu Natal.

**Aim of the research:**

The main issues I propose to examine in my research are as follows:

1. Do people receiving treatment for substance abuse also have other addictions?  
The literature and research suggests a significant co-occurrence with gambling and sex addiction.
2. If there are co-occurring disorders, what percentage of addicts manifest these?  
(Carnes, 2008: found that 87% of addicts in treatment for substance abuse had other addictions).
3. For those people with multiple addictions, which patterns of addiction interaction are present in their lives and experiences? The literature (Carnes, 2008, Flores, 2004) suggests specific patterns of addiction interaction that need to be identified in treatment.
4. How does the person with multiple addictions experience his/ her illness, its impact on their life and their experiences of treatment?
5. What do the professionals involved in treating addicts understand about multiple addictions and addiction interaction? Are their current treatment programmes addressing this? Do they believe that it could be useful to address this issue in the treatment programmes?

## **Research Design:**

To answer these questions I have a three step research design.

1. Firstly, I propose to run discussion group with professional staff at each of the three facilities looking at issues around multiple addictions and AID: do they think that these are useful concepts? Do their current treatment programmes cover these issues? If so, how, or if not, would they like to see this covered in the inpatient programme? This will inform the staff about the research process.
2. In the second phase, I will request my sample of approximately 100- 150 participants (all will be in patients at one of the above treatment centres) to complete two self administered questionnaires (SAQ's) which screen for gambling and sex addiction (see Appendices 6 and 7). There will also be an initial questionnaire that obtains basic data about the participant: age, gender, highest educational qualification attained, number of times in rehabilitation; drug use history (Appendix 5). I will explain the purpose of the study to the group and be on hand to clarify any questions when they complete the SAQ's. This information will be analysed to test what percentage of the participants have addictions to gambling and sex. The data collected in this phase will be quantitative in nature. The biographical data will provide useful information about the characteristics of the sample. This information will be tested against international research on multiple addictions. It is intended that all participants present at the centre will be invited to participate in this phase of the research. The only exclusions would be those who do not want to participate, those not admitted for substance abuse (could have been admitted for gambling) and those deemed to be too acutely psychiatrically ill by the staff.
3. Thirdly, I propose to conduct an in depth interview with 25 participants from the initial sample. These participants will be selected as follows: they do have at least one of the two addictions surveyed, and they are willing to participate in an in depth interview. Within the group that volunteers for the in-depth interview, I will select participants in a manner that gives a good 'spread' of patient profiles, in terms of age, gender and race. This interview would cover:

- biographical data, current life circumstances (relationships, employment, criminal cases pending or in the past)
- the person's addiction time line: age of initiation to first addictive substance or behaviour; progress of the illness to their current situation.
- What do they see are the factors contributing to the development of their addiction?
- What are current triggers that contribute to the drug use?
- What addictions are present: I will use Carnes' 4 categories of addiction: substances, processes, relationships and feeling states.
- how did these different addictions interact? I will use Carnes' 10 patterns of AID as the basis of this exploration.
- The impact of the person's addiction on their health, family, schooling and employment.
- Treatment: previous and current: when and where; their response to treatment.

This aspect of the research is qualitative: I will explore the data and look for themes. I anticipate that many of the participants will manifest several patterns of AID. I further hypothesise that many of the participants will have additional addictions (i.e. over and above sex and gambling, e.g. food, exercise, co-dependent relationships, compulsive debting and / or spending etc).

### **My requests for the research process:**

In the first phase, I would like an opportunity to hold a discussion group with professional staff at the centre. The discussion would focus on multiple addictions and addiction interaction to explore if they felt it was a valuable issue to address in treatment. This should take about 45 minutes to an hour and I would arrange the most convenient time for your centre.

I am hoping to screen all of your patients who are admitted during a six week period at your institution (Phase 2) as per the above description. Participation is voluntary and the participants will receive a letter from me explaining their rights. The three forms take

about 15 minutes to complete and I am in the room to clarify any queries. I will fit in with the most convenient time for you to do this screening. I request a room in which to conduct the research.

Phase three would involve my approaching participants for an in depth interview. Again, participation is voluntary.

The data gathered will be stored in a locked cupboard to which only I have access. The identity of the research centres and the participants will be kept confidential.

Thank you for your assistance in this research.

Kind regards,

**Helen Keen.**

## **Appendix 2.3: Explanatory letter made available to the participants in all three phases of the research**

Dear Respondent,

Addiction is known to be a major issue affecting the lives of many people in South Africa. Studies overseas have shown that many people who have one addiction are very likely to have other addictions. If these other addictions are not identified and treated, it places the person at greater risk of relapse. There is no research that has been done locally to investigate this issue. I am hoping, through this research, to establish if multiple addictions and addiction interaction are important issues locally. This, in turn, should lead to a better understanding about addiction and the best treatments for this illness.

I am enrolled in a Doctoral Study Programme on the topic: ADDICTION INTERACTION DISORDER at the University of Kwa Zulu Natal, Department of Social Work and Community Development. I am conducting research into people diagnosed with substance abuse dependence to see whether they have problems with other addictions. I am planning to screen firstly for gambling and sexual addiction by using a self administered questionnaire. These questionnaires should take about half an hour to complete. In addition, you will be asked to complete a one page sheet with basic information about yourself. I would also like to have your permission to consult your inpatient records as part of the research.

I am asking people currently receiving in-patient treatment at selected Rehabilitation Centres or Halfway Houses that treat substance dependence to participate in my research. Your participation is entirely voluntary and you may withdraw from the process at any stage. There will be no penalty for withdrawal from the study. There will be no payment for your participation.

Your participation in this study would be greatly appreciated.

Confidentiality: Every effort will be made to keep personal information confidential: your identifying details will not be put on the questionnaire you complete. Absolute confidentiality cannot be guaranteed. Personal information may be disclosed if required by law, such as a person being danger to themselves or to others. The data that I collect may be inspected and/or copied for quality assurance and data analysis include groups such as the Research Ethics Committee.

The data obtained after the study has been completed will be destroyed.

You may contact either myself, Helen Keen at 0834433626, or my supervisors , Dr R Sathiparsad, at 031 260 2430, or Professor Myra Taylor, at 031 260 4499, should you have any queries about your rights as a research subject.

Sincerely

Helen Keen

Social Worker

Email: [helenkeen@mweb.co.za](mailto:helenkeen@mweb.co.za) Cell: 083 4433626



**Appendix 2.4: Letter of consent signed by participants in all three phases of the research**

**Consent to Participate in Research.**

Good day

I am a PhD student from the University Of KwaZulu-Natal, Department of Social Work and Community Development.

You have been asked to participate in this research study about addiction.  
You have been informed about the study.

You may contact either myself, Helen Keen at 083 4433626, or my supervisors, Dr R Sathiparsad, tel. 031 260 2430 (work) or Professor Myra Taylor, at 031 260 4499, should you have any queries about the research project.

You may contact the **Research Ethics Office** on **031-260 3587** if you have questions about your rights as a research participant.

Your participation in this research is voluntary, and you will not be penalized or lose benefits if you refuse to participate or decide to stop at any time.

If you agree to participate, you will be given a signed copy of this document and the participant information sheet which is a written summary of the research.

**The research study, including the above information, has been described to me orally. I understand what my involvement in the study means and I voluntarily agree to participate. I have been given an opportunity to ask any questions that I might have about participation in the study.**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Signature of Participant**

# APPENDIX 3

Interview guide for discussion groups

**Appendix 3: Schedule of questions for the discussion groups held with professional staff and information sheet provided to them.**

**SCHEDULE OF QUESTIONS FOR THE DISCUSSION GROUP:**

Good day, Thank you so much for agreeing to participate in this research. Your letter and consent forms have explained why the research is being conducted and what your rights as a participant are.

I would appreciate it if you could complete a few basic pieces of information.

PLEASE NOTE THAT YOUR NAME AND IDENTIFYING DATA WILL NOT BE REVEALED IN THE RESEARCH.

***PART 1: BIOGRAPHICAL INFORMATION:***

- 1 First name (s): \_\_\_\_\_
- 2 Date of Birth: \_\_\_\_\_
- 3 Highest level of education: \_\_\_\_\_
- 4 Profession: \_\_\_\_\_
- 5 Number of years experience: \_\_\_\_\_
- 6 Number of years in the field of addiction: \_\_\_\_\_

***PART 2: THEMES TO EXPLORE:***

1. What is your experience in working with addicts: do they commonly have addictions in addition to substances? If so, what other addictions to you generally encounter?
2. Does your treatment programme currently assess for addictions other than substance abuse? If so, how?
3. What other addictions does your programme address?
4. Do you think that Carnes' 4 categories of addiction could be a useful tool in assessing multiple addictions?
5. In your treatment of addicts, do you look at the concept of patterns of addictions interacting in specific ways?
6. Do you think that this could be a useful concept to use in treatment?
7. Do you think that it would be helpful to incorporate any material on MA or AID into your treatment programmes?

**MULTIPLE ADDICTIONS:**  
**Information for Discussion with Service Providers.**

**Multiple Addictions and Addiction Interaction Disorder:**

87% of addicts have more than one addiction. These addictions do more than co-exist, they interact, reinforce, and become part of one another. They become packages. These multiple addictions combine to overwhelm the person by their complexity and power.

**Four Categories of Addictions: (Carnes, 2008).**

- **Substances:** eg alcohol, opiates, cocaine, tobacco, amphetamines
- **Processes / Appetites:** food, sex and love, work, money, exercise.
- **Relationships:** co-dependency, co-sex addiction, traumatic bonding, romance
- **Core Affect States:** despair, intensity/ risk, self loathing, shame, misery, rage.

**Ways in which addictions interact:**

- Cross tolerance
- Withdrawal mediation
- Replacement
- Alternating addiction cycles: can last as 10 years: binge/ purge cycles
- Masking
- Ritualizing: addictive behaviour of 1 is a ritual behaviour to engage in another: eg prostitutes and cocaine
- Intensification: levels of fusion: binge / partial/ full
- Numbing
- Disinhibiting
- Combining

# APPENDIX 4

Self-administered questionnaire for  
in-patients

**Appendix 4: Self -administered questionnaire completed by participants in  
survey phase (2) of the research**

**Cover Sheet for Self Administered Questionnaire: *PARTICIPANT NO:*\_\_\_\_\_**

Good day, Thank you for agreeing to participate in this research. Your letter and consent forms have explained why the research is being conducted and what your rights as a participant are. I would appreciate it if you could complete a few basic details about yourself on this form.

***PLEASE NOTE THAT NO IDENTIFYING DATA WILL BE REVEALED IN THE RESEARCH***

- 1 Date of Birth: \_\_\_\_\_
- 2 Gender: Male: ☐ Female: ☐
- 3a Town or city in which you were living prior to admission:  
\_\_\_\_\_
- 3 b Town or city where you normally live (if different from above):  
\_\_\_\_\_
- 4 Highest level of education: \_\_\_\_\_
5. Occupation: \_\_\_\_\_
- 6 Are you currently employed? YES ☐ NO ☐
- 7 (a) If so, what is your monthly income? \_\_\_\_\_
- 7 b if you are unemployed, for how long? \_\_\_\_\_
- 8 a Marital Status: Married ☐ Divorced ☐ Separated ☐ Never Married ☐
- 8 b Sexual Orientation: Heterosexual ☐ Homosexual ☐ Bisexual ☐
- 8 c Do you have a partner? Yes ☐ No ☐
- 8 d If 'yes' are you currently living with him/her?  
Yes ☐ No ☐
- 8 e Number of children: \_\_\_\_\_
- 8 f How many children are you financially responsible for? \_\_\_\_\_
- 9a Type of admission: Voluntary ☐ Involuntary ☐

9b Who played the biggest role in your admission:

The Court ☐ Employer ☐ Family ☐ Self Motivated ☐

10 In terms of this admission, how long have you been at this facility?

1 week ☐    2 weeks ☐    3 weeks ☐    1 month ☐

1-2 months ☐      2-3 months ☐      More than 3 months ☐

11 Please provide the following details regarding your previous treatment.

Name of Treatment Centre	Year	Period of sobriety after discharge

12a Drugs of abuse: Please list all and age when you began using it.

Name of Drug using it	Age when you began using it	Number of years
--------------------------	-----------------------------	-----------------

[illegible]

12b What are your drugs of choice?

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13 Are there any other members of your family with addiction problems?

Father ☐ Mother ☐ Brothers ☐ Sisters ☐

Spouse ☐ Children ☐ Grandparents ☐ Uncle ☐

Aunt ☐

***THANK YOU FOR YOUR PARTICIPATION.***



# APPENDIX 5

Problem Gambling Screening Inventory (PGSI)

**Appendix 5: Self-test for gambling completed by participants in survey phase (2) of the research**

**SELF TEST FOR GAMBLING.**

PLEASE TICK WHICH ANSWER APPLIES BEST TO YOU FOR EACH QUESTION.

	Never	Sometimes	Most of the time	Almost always
1. Do you bet more than you could really afford to lose?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Have you needed to gamble with larger amounts of money to get the same feeling of excitement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have you gone back another day to try to win back money that you lost?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do you ever borrow money or sold anything to get money to gamble?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have you ever felt that you might have a problem with gambling ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Have people criticised your betting or told you that you had a gambling problem, regardless of whether you thought it was true?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Have you felt guilty about the way you gamble, or what happens when you gamble?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Has your gambling caused you any health problems, including stress and anxiety?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Has your gambling caused any financial problems for you or your household?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Problem Gambling Assessment & Screening Instruments**

Provider No: 467589, Agreement No: 295964/00&01

Obtained from: Bellringer, M., Abbott, M., Coombes, R., Garrett, N., & Volberg, R. (2008) *Problem gambling assessment and screening instruments. Phase two: Final report*. Report prepared for the Ministry of Health, Wellington, New Zealand, Gambling Research Centre, Auckland University of Technology. Retrieved 19.9.2011 from [www.aut.ac.nz/gamblingaddictionresearchcentre](http://www.aut.ac.nz/gamblingaddictionresearchcentre)

# APPENDIX 6

Revised Sex Addiction Screening Test  
(R-SAST)

**Appendix 6: Self-test for sex addiction completed by participants in survey phase (2) of the research**

**SELF TEST FOR SEX ADDICTION.**

PLEASE TICK EITHER YES OR NO FOR EACH QUESTION.

	<b>YES</b>	<b>NO</b>
1. Were you sexually abused as a child or adolescent?	<input type="checkbox"/>	<input type="checkbox"/>
2. Did your parents have trouble with sexual behaviour?	<input type="checkbox"/>	<input type="checkbox"/>
3. Do you find yourself preoccupied with sexual thoughts?	<input type="checkbox"/>	<input type="checkbox"/>
4. Do feel that your sexual behaviour is not normal?	<input type="checkbox"/>	<input type="checkbox"/>
5. Do you ever feel bad about your sexual behaviour?	<input type="checkbox"/>	<input type="checkbox"/>
6. Has your sexual behaviour ever created problems for you and your family?	<input type="checkbox"/>	<input type="checkbox"/>
7. Have you ever sought help for sexual behaviour you did not like?	<input type="checkbox"/>	<input type="checkbox"/>
8. Has anyone been hurt emotionally because of your sexual behaviour?	<input type="checkbox"/>	<input type="checkbox"/>
9. Are any of your sexual activities against the law?	<input type="checkbox"/>	<input type="checkbox"/>
10. Have you made efforts to quit a type of sexual activity and failed?	<input type="checkbox"/>	<input type="checkbox"/>
11. Do you hide some of your sexual behaviour from others?	<input type="checkbox"/>	<input type="checkbox"/>
12. Have you attempted to stop some parts of your sexual activity?	<input type="checkbox"/>	<input type="checkbox"/>
13. Have you felt degraded by your sexual behaviours?	<input type="checkbox"/>	<input type="checkbox"/>
14. When you have sex, do you feel depressed afterwards?	<input type="checkbox"/>	<input type="checkbox"/>
15. Do you feel controlled by your sexual desire?	<input type="checkbox"/>	<input type="checkbox"/>
16. Have you neglected your: family	<input type="checkbox"/>	<input type="checkbox"/>
friends,	<input type="checkbox"/>	<input type="checkbox"/>
spouse or partner	<input type="checkbox"/>	<input type="checkbox"/>
because of the time you spend on sexual activity?		

	YES	NO
17. Do you think your sexual desire is stronger than you are?	<input type="checkbox"/>	<input type="checkbox"/>
18. Is sex almost all you think about?	<input type="checkbox"/>	<input type="checkbox"/>
19. Has sex (or romantic fantasies) been a way for you to escape problems?	<input type="checkbox"/>	<input type="checkbox"/>
20. Has sex become the most important thing in your life?	<input type="checkbox"/>	<input type="checkbox"/>
21. Has the Internet created sexual problems for you?	<input type="checkbox"/>	<input type="checkbox"/>
22. Do you spend too much time online for sexual purposes?	<input type="checkbox"/>	<input type="checkbox"/>
23. Have you purchased services online for erotic purposes (sites for dating, pornography, fantasy and friend finder)?	<input type="checkbox"/>	<input type="checkbox"/>
24. Have you used the Internet to make romantic or erotic connections with people online?	<input type="checkbox"/>	<input type="checkbox"/>
25. Have people in your life been upset by your sexual activities online?	<input type="checkbox"/>	<input type="checkbox"/>
26. Have you attempted to stop your online sexual behaviours?	<input type="checkbox"/>	<input type="checkbox"/>

Reference:

Carnes, P., Green, B., & Carnes, S. (2010). The same yet different: Refocusing the sexual addiction screening test (SAST) to reflect orientation and gender. *Sexual Addiction & Compulsivity*, 17(1), 7-30. doi:10.1080/10720161003604087

# APPENDIX 7

Interview schedule for semi-structured  
interviews

## **Appendix 7: Interview guide for in-depth interviews in Phase 3 of the research**

### **IN DEPTH INTERVIEW SCHEDULE:**

Good day, Thank you so much for agreeing to participate in this research. Your letter and consent forms have explained why the research is being conducted and what your rights as a participant are.

I would appreciate it if you could complete a few basic pieces of information.

PLEASE NOTE THAT YOUR NAME AND IDENTIFYING DATA WILL NOT BE REVEALED IN THE RESEARCH.

### ***PART 1: BIOGRAPHICAL INFORMATION:***

1. Surname:
2. First name (s)
3. Date of Birth:
4. Highest level of education:
5. Town or city in which you usually live:
6. Occupation:
7. Are you currently employed?
  - 7 a if so, what is your monthly income
  - 7 b if you are unemployed, how long?
8. Marital Status: Married      Divorced      Separated      Single Never Married
  - 8 a: If you have a partner, are you currently living with them?  
Yes      No
9. Number of children:
  - 9 a      How many children are you financially responsible for?
10. Type of admission:      Voluntary      Involuntary
  - 10 a      If involuntary, who played the biggest role in your admission:  
The Court                      Employer                      Family

***PART 2: BACKGROUND AND BEGINNING OF ADDICTION:***

- 11 Tell me a bit about the family you grew up in?
- 12 Were there any particular problems in the family?
- 13 Were there any addicts in your family; by this I mean anyone in your family have problems with drinking or drugs; gambling, sex (lots of affairs). Think not only of your immediate family, but also grandparents, aunts, uncles, cousins.
- 14 At what age did you experience your first problem with addictive behaviour (drugs, alcohol, sex). What happened? What else was happening in your life at this time: school/ work; family.
- 15 What happened next? Were there problems at school, at home? Did you have problems with the law?

***PART 3: DEVELOPMENT OF THE ADDICTIVE ILLNESS:***

- 16 When did you first realise that you had a problem? What efforts did you make to stop or control the problem?
- 17 How did you try to deny or pretend to yourself and others that you did not have a problem?

There are different categories of addiction and we will look at these, and I want us to see what other addictive processes you think apply to yourself. These are:

***Four Categories of Addictions: (Carnes, 2008)***

- **Substances:** eg alcohol, opiates, cocaine, tobacco, amphetamines
  - **Processes / Appetites:** food, sex and love, work, money, exercise, money
  - **Relationships:** co-dependency, co-sex addiction, traumatic bonding, romance
  - **Core Affect States:** despair, intensity/ risk, self loathing, shame, misery, rage.
- 18 If we draw a time line from the first time you used until today, and we list the different addictions, what would this time line look like?
  - 19 What do you see as triggers for your addiction? (e.g. family conflict, certain people).



***PART 4: PRESENT EXPERIENCE OF THE ADDICTION AND EXPLORATION OF ADDICTION INTERACTION:***

20 We've now got the time line and the variety of addictions. Now, we know that these addictions don't simply exist side by side; they interact with one another in specific ways. I have a list drawn up by researchers in the field that name specific ways in which addictions interact. Can we look and see which, if any, of these interaction patterns applied to you?

**Addiction Interaction:**

- 1. Cross Tolerance:** No developmental sequence is required for a new substance: e.g. between alcohol and benzodiazepines.
- 2. Withdrawal mediation:** moderating or relieving the discomfort of withdrawal through the use of another addictive substance: e.g. smoking
- 3. Replacement or switching:** Add or replace 1 addiction with 1 or more addictions. Similar behavioural and emotional features remain.
- 4. Alternating addiction cycles:** These can include binge / purge cycles. It is important to get a thorough history, so as to see the bigger picture. Often, client is sexually bingeing and anorexic; marries and becomes sexually anorexic and compulsively eats and gains a large amount of weight.
- 5. Masking:** Addict uses one addiction to cover up another, perhaps more substantive addiction.
- 6. Ritualising:** the addictive behaviour of one addiction serves as a ritual pattern to engage another.
- 7. Intensification:** the different addictions increase the potency of the others. Fusion levels can vary from full fusion, to partial and binge fusion.
- 8. Numbing:** Addiction is used to medicate shame or pain caused by other addiction or addictive bingeing. Where this is used, there is a high probability that the person is a trauma survivor
- 9. Disinhibiting:** One addiction is used to lower inhibitions for other addictive acting out.
- 10. Combining:** Mixing addictive experiences to moderate responses due to neuropathway interaction, e.g. Speedballing. (Carnes, 2008; Flores, 2004:8).

Are there any other patterns which I have not mentioned?

- 21     What have been the consequences of these addictions? (health, relationships, employment, finances, criminal involvement).
- 22     What treatment have you had for your addiction? Where? When? What was your response to treatment?
- 23     What are your plans for the future?

***THANK YOU FOR YOUR TIME AND PARTICIPATION.***

# APPENDIX 8

Biographies of the 25 participants from the in-  
depth interviews

## **BRIEF BIOGRAPHIES OF THE PARTICIPANTS**

### **Female Participants**

#### **8.1 Anna aged 25**

Anna was the youngest of four children. She described a happy stable childhood until she was 12 year old. Her parents divorced due to her father's infidelity. Anna and her mother and siblings moved to a new town to live with her maternal grandmother who blamed Anna for the divorce. Anna began running away from home at 13, taking dagga and alcohol and she began stealing to pay for these drugs. At 16 she began using Whoonga. She was abducted and held captive by her drug merchant's friend for one week during which time she was raped repeatedly. Her friends helped her to escape and Anna did not disclose this rape for eight years until her first admission for treatment in 2011. Anna began gambling at school and used gambling and casual relationships with men to fund her drug habit. Whoonga has been her drug of choice since 2005. Anna has met men and exchanged nude photographs via the internet in exchange for money or airtime. She reported one previous admission for treatment.

#### **8.2 Ayesha aged 25**

Ayesha grew up in an intact family and was the youngest of three girls. Both parents abused alcohol and her father worked away from home on contract. All three girls ran away from home in adolescence, at about 14 years of age because they wanted to have boyfriends. Ayesha was raped at 13 when out with peers experimenting with dagga. She did not disclose the rape. She moved in with her husband's family and had a child at the age of 16 years. Soon afterwards, Ayesha began leaving her daughter with her mother-in-law and participating in drug binges (Ecstasy, crack and later Whoonga) and having multiple extra-marital relationships. Ayesha reported being raped as an adult and was homeless due to her drug dependence. This was her first admission for treatment.

#### **8.3 Cassie aged 52**

Cassie was the third child in a family of six children and she speculated that she and her siblings all had different fathers as they all look very different and her mother had many partners. Cassie cannot remember her parents ever living together. She and an older

brother went searching for her father who lived as a hobo. He was very drunk on the two occasions she when found him. There was polymorphous incest between the siblings and at five Cassie began giving sexual favours to men in exchange for sweets. She also stole food to feed her siblings. Cassie and her siblings were placed in Children's Homes due to neglect and Cassie became a chronic runaway in a desperate attempt to see her mother. Her stepfather molested all three sisters and Cassie endured the abuse in order to see her mother. He married Cassie's eldest sister after he had impregnated her. Cassie began smoking dagga at 14 years. She fell pregnant and was forced to place her baby in adoption when she was 16. She has never had any other children. She began prostituting soon after leaving school and her drug use escalated rapidly thereafter and crack cocaine led her to losing all the material possessions she had accumulated. She went gambling in the context of prostitution, with clients. She viewed her prostitution and lifelong habit of compulsive masturbation as addictions. Cassie had been imprisoned for fraud and prostitution. She had several long term relationships with gangsters. Cassie agreed to be admitted for rehabilitation when in prison. She reported having severe renal problems caused by the drug abuse. This was her first admission for treatment.

#### **8.4 Daisy aged 31**

Daisy was the eldest child in her father's second family. They lived on the same property as his first wife and children from that relationship and there was a lot of conflict between the two families. Daisy had a child at 16 and had to drop out of school the following year when her mother died because she had to care for her siblings. She began gambling at school and continued to do so after leaving school. She began dealing Mandrax to supplement the family's income. She began smoking dagga in her 20's and then began smoking Whoonga, initially to lose weight and then she became addicted to it. She had earned a living though drug dealing for most of her adult life. Her brother and father died shortly before she asked to be admitted for treatment. This was her first admission for treatment.

### **8.5 Jill aged 28**

Jill had one older brother. She was brought up by her grandmother from the age of six after her parents' divorce. Her mother did not maintain contact after the divorce. Jill recalled that she would be very naughty to get her father to visit her. He used to beat her harshly. Jill felt very rejected when she was placed in a special class and blamed her father for this. She ran away from home at the age of 12 and lived as a street child. She ran away from any institution into which she was placed. She was involved in witchcraft for some years, as those people assisted her with food and clothing. Jill's brother would offer her food and shelter in exchange for sexual favours with him and his friends. Jill began smoking dagga at nine and reported polysubstance abuse. She began gambling as a teenager and used her winnings to buy drugs. She stated that she was sexually promiscuous with both men and women. Jill has been raped many times as an adult, usually when in unsafe situations. She has prostituted and 'worked' for gangsters for periods of time when she using drugs, especially methamphetamine which was her drug of choice. Jill has one son and reported that she is homosexual. Jill had had three previous admissions for treatment.

### **8.6 Kelsey aged 19**

Kelsey was placed in care at birth and had several foster care placements. She was placed with her final family when she was about five years of age. She was placed with another girl who was the same age and far better behaved and academically more proficient. Kelsey felt rejected by her family. She was sexually abused at the age of 10 by the father of a school friend. At 17, she ran away from home after meeting a man via the internet who seduced her and abducted her to a brothel. She was abused there for several weeks and was able to leave when the police raided the establishment. Kelsey began using alcohol and dagga at 16. Her drug of choice is cocaine. She reported having been involved in many relationships and compulsively looks for love and sex with both men and women. Kelsey had lost employment due to her sexual acting out and drug use. This was her first admission for treatment.

### **8.7 Mandy aged 36**

Mandy was the middle of three children. She was repeatedly raped throughout her childhood by her father, brother and stepfather. The latter used to film the abuse and made her watch the videos as part of his grooming process. The children were placed in children's homes after her father had beaten her and her mother very severely with a fan belt. It took her a year before she talked or walked again. Mandy had a history of very violent acting out in institutions. She was a chronic runaway and was raped when on the run from the children's home. Mandy never reported any of the abuse. Mandy began prostituting at 17 after leaving school and has used many different drugs. She specialised in sadomasochistic services as a prostitute and also had relationships with gangsters. She also enjoyed fighting and had a reputation of being very tough. She reported one very violent relationship with a man. She eventually reported him to the police for murder in order to exit the relationship. Mandy reported two previous admissions for treatment and had a history of several suicide attempts.

### **8.8 Pria aged 19**

Pria was the third of four children and she had a brother who is also a drug addict. Both of her parents appeared to be compulsive gamblers and they encouraged Pria to accompany them to the casinos to wean her off Whoonga. Pria has a gambling addiction. She described a strict and rigid family where her father was absent due to work and her older brother disciplined her harshly. She ran away from home at 17 and she began using dagga and mandrax. Her boyfriend introduced her to Whoonga. He is now in prison for theft. Pria's father enabled her drug use and undermined her mother's attempts to deal with her drug use. Pria had one previous admission for treatment.

## **Male Participants**

### **8.9 Andy aged 34**

Andy was the middle child of three and had two sisters. He described his mother as being emotionally unstable and his father as being distant and depressed. His father was alcoholic and spent money irresponsibly. He was 14 when his parents divorced. His

father left South Africa three years later and there was been little contact between them. Andy began using alcohol and later dagga at the age of 14 years and found that these drugs eased his obsessive compulsive disorder. His drug use escalated to club drugs, cocaine and methamphetamine. Andy developed a major gambling addiction soon after starting to use methamphetamine. It also affected his sexuality and he became obsessed with watching pornography. Andy reported one previous admission for treatment.

#### **8.10 Ben aged 25**

Ben grew up in an intact family with no obvious pathology. However, both he and his younger brother began using drugs at 14 and both have been involved in criminal activities from adolescence. Ben's girlfriend's family introduced him to drugs at the age of 13 years. Ecstasy and cocaine were the first drugs he used. He reported intravenous use of heroin and other opiates. Ben had a gambling addiction and was involved with criminal syndicates who counterfeit money. This was his eighth admission for treatment. He had a history of infidelity and seducing women with whom he has codependent relationships.

#### **8.11 David aged 40**

David was the third of five children. His parents separated due to his father's alcoholism and violence. His father died when David was 11 years old. The family experienced extreme poverty as his mother worked as a machinist in a factory and there was little extended family support. David began drinking alcohol at 15 and his use of alcohol escalated rapidly and, over the years, he had lost many jobs due to his alcohol abuse. David began using Whoonga in 2009 and was unable to work since then due to the severity of his addiction. He was married with two children but the couple separated due to his substance abuse. David began watching pornography when he started smoking Whoonga and he described how he became addicted to it. This was his third admission for treatment.



### **8.12 Joe aged 35**

Joe was the older of two children. His mother died in a car accident when he was eight. All mementos of his mother were removed within two months after her death and Joe felt he had to make his father happy by appearing as if he was coping. His father began abusing alcohol after his wife's death and re-married 18 months later. Joe and his sister had a poor relationship with their stepmother. Joe was "adopted" by a school friend's family and he escaped there until this friend sexually abused him. Joe began abusing alcohol at 16 and this drug use rapidly escalated to dagga, LSD and a wide range of amphetamines. His drug of choice was Ritalin. He reports that he accepted that he was gay at the age of 26. In addition to sex addiction, Joe has bulimia and an exercise disorder. He had had one previous admission for treatment.

### **8.13 John aged 28**

John was the youngest of three children. He never knew his father and the first time he met his father's family was when he attended his father's funeral. He cannot remember how old he was at the time. John's older brother brought him up as his mother was working away from home. This brother died when John was 20. He began using dagga at the age of 17 and soon began using Mandrax. John dropped out of school in Grade 11 due to the drug abuse. He began gambling at school and has continued gambling. John was unfaithful to his girlfriend with whom he has a child. He had many casual relationships, often with women he met online and with whom he traded nude photographs and has habitually patronized prostitutes. He has worked as a security guard and has been involved in violent crime to support his addiction. This was his first admission for treatment.

### **8.14 Krish aged 26**

Krish described a harsh childhood where he perceived his father's discipline as cruel and unreasonable. His father abused alcohol and used to assault his wife. As an adult, Krish protected his mother and assaulted his father. He has had many arrests because of this. He began using dagga at the age of 15, alcohol and then Mandrax at 16 years of age. Krish has had several arrests for housebreaking and theft which he does to fund his

addiction to crack cocaine, dagga and Mandrax. Krish gambled compulsively at the casino and the tote and lost a lot of money this way. He has seduced many women; most of whom he met at local shopping malls, and he believed that he cannot control this behaviour or his addiction to pornography. This was his third admission for treatment and he was committed for treatment via the criminal court.

#### **8.15 Lloyd aged 22**

Lloyd was brought up by his maternal grandmother who worked as a domestic worker. She was described as a strict and religious woman. His aunt and uncle lived in the home and both abused alcohol and drugs extensively and were involved in illegal activities. Lloyd's grandmother told him that his mother was working in Johannesburg as a confectioner. He overheard teachers at school talking about his mother's suicide and then learned that his mother had committed suicide when he was a baby. When he asked his grandmother about this she said it was due to his father's infidelities. Lloyd's father did not play an active role in his upbringing. Lloyd began sniffing benzine at the age of 10 and began gambling at school. At 14 he began using alcohol and dagga and began gambling, stealing from home and neighbours to pay for drugs. Lloyd says he is obsessed with sex and he has had many girlfriends and seduces girls, but becomes bored with them. He reported one previous admission for treatment.

#### **8.16 Lwazi aged 22**

Lwazi was the third child in a family of four. He grew up in an intact family and had a close relationship with his mother. His father was alcoholic and was uninvolved in his children's upbringing. Both of his brothers abused drugs: one smoked dagga and his younger brother abused Whoonga, as does Lwazi. He began smoking dagga at 15, abusing alcohol and ecstasy at 16; and Whoonga at 18 year of age. Lwazi began gambling in his neighbourhood and was unable to control this. He also described a loss of control over sex: he felt controlled by his libido and has had many sexual partners. He used the internet to meet partners. This was his first admission for treatment.

### **8.17 Martin aged 23.**

Martin never knew his father. He was brought up by his maternal grandmother who was alcoholic. His mother was a prostitute and alcoholic. Although she did not live with Martin, she visited regularly and she used to take Martin out with her when she was prostituting. He was sometimes present in the room when she had sex with her clients. Martin was sexually abused by an uncle when he was about five. He had never disclosed this prior to the interview. Martin was placed in a children's home after the deaths of his mother and grandmother. He was there from the ages of 10 to 15 and did not receive any grief counseling whilst living there. He was released to his aunt's fostercare at the age of 15. He began using dagga at 13 and soon progressed to Mandrax, crack and then, at 17, Whoonga. Martin was expelled from his special school at 16 years of age. He ran away from home and supported himself by committing crime. He gambled at "the shacks" in his neighbourhood and stole for this. Martin was also addicted to pornography, compulsive masturbation and having sex with prostitutes. This was his first admission for treatment and he was admitted via the criminal court.

### **8.18 Paul aged 34**

Paul's parents divorced when he was about five years old and his mother battled to cope with him. She was addicted to prescription drugs and became rather promiscuous after her divorce. Paul had a much older brother who was away in boarding school. Although intelligent, Paul battled scholastically. His mother abandoned him at a friend's home when he was about eight and they called the police and he was taken to live with his father. Paul was placed in boarding school where he was sexually abused by the doctor and principal. The principal also ran sex rings and Paul was repeatedly abused from the ages of 9 to 13. His father refused to believe Paul when he reported this to him. He began using dagga at the age of 15 and his drugs of choice were LSD and magic mushrooms. He was also addicted to pornography, including child pornography which developed after he had stopped using hallucinogens. This was his first admission for treatment.

### **8.19 Peter aged 23**

Peter was the elder of two boys. He described a stable childhood until his father was murdered when he was 11 years old. The family's standard of living dropped and they have not been able to afford electricity since 2000. He and his brother became uncontrollable and he began smoking Whoonga at the age of 11. He left school in Grade 7 and does piece work, but his main source of income was through crime: dealing drugs and mugging people. Peter gambled at the tote with friends and cannot control his gambling. He had a history of going to prostitutes but was very distressed that the Whoonga has suppressed his sex drive. This was his first admission for treatment.

### **8.20 Raj aged 51**

Raj grew up in a close knit, rigid family and felt very controlled by his parents whom he described as old fashioned. He is the youngest of eight children. He began rebelling at the age of 14 and at 20 he left home to live with a woman with whom he had fathered a child. His wife had multiple affairs and is alcoholic. Raj began drinking with his wife at the age of 20. At 26 he began using Mandrax and later crack cocaine. Raj has lost many jobs as a truck driver due to his drug use and criminal activities, such as selling the spare tyres and carrying illegal loads. His gambling and sexual addiction escalated rapidly when he started using crack cocaine. Raj suffered a stroke in 2011. He had had three previous admissions for treatment.

### **8.21 Sagren aged 18**

Sagren described growing up in a single parent home and he did not have a significant relationship with his father. His mother is mentally ill, being diagnosed as a schizophrenic. He has one sister who is 11 years younger than himself. There was incest in his family: Sagren's grandfather was sexually involved with his daughter (Sagren's aunt). He was placed in a children's home at 10 years of age due to neglect and was placed in a special school due to educational problems. Sagren began using dagga at 13 and his behaviour at the children's home became unmanageable and included stealing and running away. He reported that he had traded sex with gangsters for drugs and he

had been sexual with women he meets at malls. This was his second admission for treatment.

#### **8.22 Sam aged 22**

Sam described growing up in a close and loving family with clear and strict rules. He has a twin brother and two older siblings. His father died of a heart attack when Sam was 18 years old. Sam's older brother abuses alcohol but his twin and sister do not abuse substances. Sam began gambling at school and continued with this after he dropped out of school. At 15 years of age he began using dagga and added Mandrax at the age of 16. He used stealing and gambling to fund his drugs. Sam was shot at a shebeen and part of his face was destroyed. He changed his drug habits after leaving hospital and used crack cocaine and Whoonga. Sam frequents prostitutes regularly, views pornography on his cellphone and feels that he cannot stop cheating on his girlfriend. This was his first admission for treatment.

#### **8.23 Sipho aged 23**

Sipho grew up in an intact family and is the eldest of three children. His parents' relationship was described as difficult. Sipho's mother is a gambling addict and she takes him with her to Casinos where she frequently spends the weekend. Sipho states that he is homosexual but his parents cannot accept this. He therefore has a girlfriend and two children with this woman to please his parents. He has been involved in many gay relationships from the age of 14 years and meets men in internet chat rooms. Sipho's sex addiction pre-dates his drug use which began when he was 21. He began using dagga but soon found its' effects were no longer as potent. He is addicted to Whoonga. He is employed as a nursing assistant and was on a final warning from work. This was his first admission for treatment.

#### **8.24 Thabo aged 22**

Thabo was the fifth child in a family of seven children. He described his family as being very religious and strict and said that he was the only addict in his family. The rest of his siblings have tertiary qualifications and are gainfully employed. He began smoking

cigarettes at 13, dagga at 15 and during his matric year he was abusing alcohol very heavily. Thabo began using Whoonga during his second year at college. His family used to give him money in an unsuccessful effort to stop him from stealing from home and the neighbourhood. Thabo is in the 'at risk' category for gambling and says he began gambling at school and he uses it to fund his drug use. His sexual addiction was characterised by compulsive viewing of pornography and masturbation. This was his first admission to treatment.

### **8.25 Tony aged 48**

Tony's parents divorced when he was two and he was moved between the two families. His mother's family labeled his father's family as bad and being involved gangsterism. Tony began smoking dagga at nine years of age and his friends were the gangsters in his area. He was constantly in trouble at school and he became involved in criminal syndicates from the age of 16 and his drug use escalated. Tony had two failed marriages and had no contact with his children due to his violence. He lived with and pimped for prostitutes for many years. He was now a quadriplegic due to nerve damage from injecting methamphetamine. He had had seven previous admissions for treatment.

27 August 2012

**Ms Helen Moira Keen 9151915**  
**School of Applied Human Sciences**

Dear Ms Keen

**Protocol reference number: HSS/0793/012D**

**Project title: An Exploration of the Phenomena of Multiple Addictions and Addiction Interaction in Durban, South Africa .**

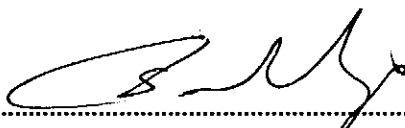
**EXPEDITED APPROVAL**

I wish to inform you that your application has been granted Full Approval through an expedited review process.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. **PLEASE NOTE:** Research data should be securely stored in the school/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully



.....  
**Professor Steven Collings (Chair)**

/pm

cc Supervisor: Dr Reshma Sathipersad & Prof Myra Taylor  
cc Academic leader: Prof Johannes Hendrina Buitendach  
cc School Admin: Mrs Doreen Hattingh

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Founding Campuses: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville