Exploring the Role and Patterns of Developmental
Trauma in Substance Using Offenders

by

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Abstract

The purpose of this thesis was to explore the relationship between developmental trauma, substance use and offending behaviour. The link between these constructs has rarely been explored, regardless that there are many theories explaining the long-term trajectories of developmental trauma. Recognised is the relationship between developmental trauma and substance use, which is often referred to as the self-medication hypothesis. There is also a widely acknowledged link between substance use and many types of offending. Many theories underpinning the research consider substance use as a criminogenic need that must be targeted in treatment; however these models rarely consider the role of developmental trauma as a possible precursor to substance use.

The current thesis aimed to explore developmental trauma and substance use within the frameworks of the Risk, Needs and Responsivity model and the Good Lives Model of offending, and to outline the limitations of these models in respect to understanding the interactive relationship between these three issues. The study involved 50 alcohol and other drug users who were on community based forensic dispositions at the time of treatment for their alcohol and other drug issues.

Participants’ trauma history as measured by the Childhood Trauma Questionnaire (CTQ), Posttraumatic Stress Disorder (PTSD) symptoms as measured by the Modified PTSD Symptom Scale (mPSS), Complex Posttraumatic Stress Disorder (CPTSD) symptoms as measured by the SIDES-SR, alcohol use and nonexperimental depressant, stimulant, hallucinogen use were assessed. Participants and their treating clinicians also responded to a number of qualitative questions aimed at exploring their narrative for the
potential relationships between developmental trauma, substance use and offending.

Quantitative analysis of the results included Chi Squares, Spearman’s Correlations, Logistic Regression and t-tests. Findings indicated that participants experienced developmental trauma significantly more, in number and form, compared to the general community. Neither physical abuse nor sexual abuse severity were found to significantly relate to post traumatic symptomatology. Experiencing different trauma types was also not significantly correlated with self-reports of self-medication. Contrary to previous research, participants with PTSD and CPTSD did not report depressant use as their primary substance classification, nor did they have a higher probability of offending violently. The hypothesis that participants who had offended violently would endorse more clinically significant scores on the SIDES-SR subscale- Alterations in Regulation of Affect and Impulses was not supported. Also not supported was the hypothesis that participants who reported depressant use as their primary substance would have higher PTSD intrusive symptomatology. Themes emerging from the qualitative analysis included: self-medication, relaxation, increased energy and confidence, fun, supporting dependency, financial gain, protection of self and others, revenge and boredom. Clinician responses about their clients in relation to this were similar; however four additional themes emerged from their transcripts: antisocial modelling, peer pressure, lack of consequential thinking and relationship stressors/conflicts. The majority of participants agreed that there was a link between their substance use and offending, as they either needed to offend in order to support their drug dependence or offended when substance affected or experiencing withdrawal. Participants also mostly acknowledged a link between
their mental health/wellbeing and substance use. The reasons that emerged to account for this link included: using alcohol and other drugs to manage mental health or as a coping strategy. Participants also reported that alcohol and other drug use had either led to a mental health issue or negatively impacted an existing one. Qualitative analysis of the reasons cited for the factors that make it difficult to stop using and offending revealed a number of themes including: drug using peers, boredom, stress, access, dependency and financial gain. Clinicians’ responses to the qualitative questions exploring the life experiences that may have resulted in their clients’ substance use and offending, revealed the following themes: antisocial modelling and peers, alcohol and other drug use, relationship and family dysfunction, unstable accommodation and/or employment, poor mental health, trauma, and grief and loss. In line with the Good Lives Model (GLM), participants identified the following primary goods: improved physical health and fitness, employment and financial security, improved relationships and mental health, abstinence and stable accommodation.

Overall, it was concluded that the results from the current study were likely contrary to previous research due to insufficient power, however there is no real way of knowing if the insignificant results were due to this or the possibility that no relationship exists. While the lack of sufficient power has not allowed patterns and trajectories to emerge, it has demonstrated that developmental trauma is experienced disproportionally more in offender and substance using populations. Further, the qualitative aspect of the study has proposed the utility of the Good Lives Model in developing holistic treatment plans that encompass primary goods identified by these individuals. It is suggested that future research should focus on the combined effects of different types of developmental traumas on post
traumatic symptoms and other functional impairments. In addition, it is suggested that empirical study would benefit from exploring causal developmental pathways and patterns leading to substance use and offending behaviours.
Overview

Due to the economic, societal and personal cost associated with crime, theorists and researchers have long endeavoured to explain potential correlations and causal pathways associated with offending behaviours. Of these theories, informed by social learning theory and rational choice theory, two have received much endorsement and are considered the most up to date within this field in respect to offender treatment. The first is the Risk, Needs and Responsivity Model that aims to identify criminogenic needs and target them within treatment. The second is the Good Lives Model that recognises that all people have primary goals and, without realisation of these goals, are unable to live happy and fulfilling lives in socially acceptable ways. Both of these models discuss developmental trauma and substance use in terms of non-criminogenic and criminogenic needs; however they separate them as two distinct entities. Criminogenic needs are defined as attributes of offenders that are directly linked to criminal behaviour. This separation is problematic as it fails to recognise the explicit relationship between developmental trauma and substance use, often referred to as the self-medication hypothesis. The current thesis aims to explore the relationship between substance use and developmental trauma to better conceptualise these within forensic theoretical frameworks.

While the high prevalence of developmental trauma in offenders is well documented; attributing causal relationships are avoided due to the criminal justice systems relentless need to separate victimisation and crime (Rumgay, 2004). It is also widely accepted that many offenders have histories of, or current substance use disorders (Smith & Ecob, 2007). However this recognition is often associated with delinquent peer relationships and poor modelling (Smith & Ecob,
2007) rather than the experience of developmental trauma potentially leading to self-medication. While previous research has clearly outlined that developmental trauma and substance use is over represented amongst offenders, the relationships between the three constructs have rarely been explored (Lisak & Miller, 2003). Firstly, there is a paucity of research exploring offenders’ experience of trauma. Research in this area is important in order to develop an understanding of the potential role of trauma in offending, to inform professionals’ awareness of offenders’ exposure to traumatic and adverse life events and to provide useful information in terms of developing services to meet the mental health needs of offenders (Paton, Crouch & Comic, 2009). The current thesis primarily aims to explore this role in the hope of making assessment and treatment recommendations to best service these offenders. Secondly, while the connection between offenders using substances and developmental trauma is commonly accepted amongst clinicians; theories of crime fail to incorporate this understanding within their models of criminal behaviour. In the Risks, Needs and Responsivity and Good Lives Model, substance use is generally accepted as being a criminogenic need and therefore targeted in treatment. The consequences of developmental trauma are considered non criminogenic, and therefore not necessarily targeted in treatment (Andrews & Bonta 2010). The current thesis argues that developmental trauma and substance use cannot be separately characterised into non-criminogenic and criminogenic factors due to the influence that each of these has on one another.

Broadly, this thesis will explore the three constructs of developmental trauma, substance use and offending and will propose a study that will seek to explicate the complex interplay between them in the context of understanding and
addressing offending behaviours. Each construct will be explored independently and then incorporated into an explanation of comorbidity. In order to better understand this complex interplay, the broad construct of trauma and the behavioural, cognitive and emotional consequences of developmental trauma will be discussed in Chapter One. Within this Chapter, the prevalence of trauma generally and developmental trauma specifically will be discussed, highlighting the high incidence of this type of trauma being perpetrated by caregivers. Consequently, attachment theory will also be discussed, as both a potential risk and protective factor that can alter the progression and course of potential psychopathologies. In Chapter Two a discussion of and the potential diagnoses of Conduct Disorder, Antisocial Personality Disorder, Posttraumatic Stress Disorder (PTSD) and Complex Posttraumatic Stress Disorder (CPTSD) will follow with specific attention paid to the assessment and diagnoses of PTSD and CPTSD. Chapter Three will explore the relationship between developmental trauma and substance use with particular reference to the self-medication hypothesis. This chapter will also explore the relationships between substance use, trauma and offending. Chapter Four focuses on the theoretical offender frameworks of the Psychology of Criminal Conduct (PCC), Risk, Needs and Responsivity (RNR) and the Good Lives Model (GLM). This chapter will also explore the complex interplay of developmental trauma and substance use through these lenses. Chapter Five considers the clinical best practice considerations in assessment and treatment approaches recommended to address substance use and developmental trauma in offenders. Present clinical implications and limitations of these recommendations will also be explored.
Chapter Six presents the current study, including presenting the rationale for the research, aims and hypotheses. Chapter Six also outlines the mixed methodology of the study, including details of participants, the procedures, the measures and the analyses applied to the data. Chapter Seven presents the results of the study, Chapter Eight summarises and examines the key findings of the study, and concludes with a discussion of the implications in relation to the theoretical conceptualisation, and the model of care proposed in the thesis.
Chapter 1: Trauma

1.1 Chapter Overview

The aim of this chapter is to define trauma and to discuss prevalence data for both trauma generally and developmental trauma specifically. While the objective definitions of trauma and developmental trauma are distinguishable, the subjective experiences of the two are often intertwined. Therefore, the experience of trauma will be discussed broadly and encompass all types of trauma. This chapter also aims to highlight the potentially devastating consequences of trauma and developmental trauma specifically. Gender differences in terms of trauma response and coping will be discussed as well as symptomatology, relational difficulties, attachment and psychiatric disability. An in-depth analysis of attachment theory is outside the scope of this thesis. For further elaboration and reading into attachment theory refer to Bowlby’s and Ainsworth’s contributions to the literature.

1.2 Definitions and Incidence of Trauma

Trauma is defined as either physical injury caused by some direct external force or psychological injury caused by some extreme emotional assault (Reber & Reber, 2001). According to Centre for Addiction and Mental Health, (2003) “a traumatic experience is an event that continues to exert negative effects on thinking (cognition), feelings (affects) and behaviour long after the event is in the past” (p. 72). Trauma is often associated with abuse and criminal victimisation. According to recorded crime statistics, over one million people in Australia are victimised by crime every year. In 2013, the ABS released the 2012 victimisation rates for crimes against persons. The offence categories were broken down as follows: murder, 1.1 victims per 100,000 persons, attempted murder, 0.7 victims per 100,000 persons, manslaughter 0.2 victims per 100,000 persons, sexual
assault 80 victims per 100,000 persons and kidnapping/abduction 2.8 victims per 100,000 persons. However, according to Cook, David and Grant (1999) the exact figure is unknown, as only approximately 40 percent of crimes are reported to police. In addition, this figure does not take into account secondary victims (friends and family members of the victim/survivor), who also suffer as a result of the crime (Cook et al., 1999). Large community surveys indicate that between 50 to 75 percent of the population have experienced at least one potentially traumatic event across the lifespan, with most reporting two or more events (ACPMH, 2013). According to the Australian Guidelines for the Treatment of Adults with Acute Stress Disorder and Post Traumatic Stress Disorder (Australian Centre for Post Traumatic Mental Health, 2007), only around 30 percent of the Australian population report being a victim of crime.

1.3 Effects of Trauma

As victimisation and traumatisation are common human experiences occurring to persons with a wide range of premorbid personality styles, ego strengths, mental and physical illnesses, social supports, stressors, and cultural backgrounds, there is no universal profile for victims of violence (Kluft, Bloom & Kinzie, 2000). Any traumatic event has the potential to precipitate an acute psychological response, including fear, anger, recurrent distressing thoughts, guilt, depression, anxiety, nightmares, irrationality and generalised hyper arousal (Bisson & Shepherd, 1995). Common symptoms reported by crime victims/survivors include: (a) emotional numbing alternating with heightened arousal: (b) intrusive re-experiencing in the form of traumatic flashbacks or nightmares; (c) avoidance of situations reminiscent of the trauma: (d) emotional constriction and interpersonal distancing; and (e) impairment in concentration,
memory, or other cognitive functions (Miller, 1998). Common secondary and
associated symptoms shown by crime victims/survivors include: depression,
aggression, anxiety, substance abuse, physical illnesses, low self-esteem, identity
confusion, difficulties in interpersonal relationships, and guilt or shame (Carlson
& Dutton, 2003).

Some of the prior research has suggested that men and women should be
considered separately due to the differences in overall prevalence rates of
experiencing trauma in general and in respect to specific types of trauma, as well
as the reported impact of the trauma (Avant, Davis & Cranston, 2011).
Historically, trauma response research has been based on the comparison of male
war veterans and female sexual assault victims/survivors. This research has
resulted in some theorists proposing that females are more vulnerable to adverse
reactions or stress responses, and that post traumatic symptoms are more severe in
females rather than males. Across studies in which gender is compared, PTSD
and depression risk in victims of crime is consistently higher for women
(Kilpatrick, Acierno, Resnick, Saunders, & Best, 1997). According to Keane
(1995) examination of the rates of trauma exposure and PTSD across studies
indicates significant gender differences. It appears that while men report higher
rates of exposure to traumatic events, women report more PTSD. This may be
attributed to women being more susceptible to PTSD due to a possible link to
factors associated with gender differences in depression. Alternatively it may be
attributed to the types of stressors women experience such as sexual abuse that
are more strongly related to the development of PTSD due to the intrusive nature,
irrespective of gender. According to Kimerling, Ouimette, and Wolfe (2002),
neither the types of traumatic events nor perceptions of threat fully explain why
women are more susceptible to developing PTSD. According to Foa, Keane, and Friedman (2000), lifetime prevalence rates of PTSD are twice as high for women as men (10.4% vs. 5%) and women are four times more likely to develop PTSD when exposed to the similar traumatic events as men.

The difficulty with past research is the limited number of studies that have investigated stress responses to similar traumatic events and specific gender differences and factors that could account for these findings (Wolfe & Kimberling, 1997). Much of the current research into gender differences of trauma reaction, propose that women suffer more depression and psychological distress than men because their social roles expose them to higher levels of negative stressors such as social conflict (Andrews, Brewin, & Rose, 2003; Crevier, Marchand, Nachar & Guay, 2014; Kenney, 2003; Wolfe & Kimerling, 1997). However, in contrast it has also been proposed that women experience higher levels of psychological distress than men post crime due to their greater vulnerability to the negative effects of stress, rather than their greater exposure to conflict and stress (Andrews et al., 2003). Kenney (2003) proposes that there are gender specific grief cycles and it is therefore necessary to apply different techniques to treat victims of each sex. For both sexes there appears to be generalised themes that could account for differing reactions and recovery from trauma. Andrews et al. (2003) examined the relationship between gender and social support in the development of PTSD symptoms in crime victims. They found that women generally experience more negative reactions from family and friends than men, resulting in higher rates of PTSD symptoms. Andrews et al. also found a negative correlation between perceived social support and the
occurrence of PTSD symptoms. The greater satisfaction of the support received the less severe the PTSD symptomology.

Regardless of gender differences, Kennedy (1983) proposed that, depending on the nature of the crime, the victim/survivor has suffered in varying degrees a violation of self (or extension of self in the case of property), as well as a violation of sense of trust and sense of autonomy. In addition he posits that, once victimised, the victim/survivor re-evaluates, in varying degrees, all prior assumptions of trust in order not to be betrayed again. When the victim/survivor loses their sense of autonomy during the crime, he/she also loses a certain amount of control over their life. This loss of control and autonomy is difficult as an adult, but even more challenging when experienced as a child due to autonomy having not yet been developed. Further, trauma that occurs within a child’s developmental years often disrupts neurological and psychological equilibrium (Khoury, Tang, Bradley, Cubells, & Ressler, 2010). There is evidence that has demonstrated that developmental trauma compromises neural structure and brain function. This results in survivors being more susceptible to later cognitive deficits and psychiatric pathology such as substance use disorders, PTSD and other mood related pathology (Khoury et al., 2010).

1.4 Developmental Trauma

Developmental trauma encompasses both acts of commission (physical abuse) and acts of omission (neglect) where the absence or withdrawal of resources and/or support may threaten the child’s safety and wellbeing (Cloitre et al., 2009). Exposure to chronic, repeated or multiple developmental traumas has been proposed to result in a complex profile that not only includes post traumatic symptomatology, but also other symptoms reflecting disturbances in affective and
Developmental research has demonstrated that developmental trauma can impair normal development related to emotional regulation and interpersonal behaviours. Van der Hart et al., (2004) argue that exposure to trauma when personality is still forming can result in structural dissociation. Further, Van der Hart et al. assert that dissociation is maintained by classically conditioned defensive responses (Dell & O’Neil, 2009). Understanding the impact of developmental trauma on self-regulatory capacities better informs our conceptualisation of complex PTSD. “Disturbances in self-regulation account for both over activation and deactivation/avoidance in emotions and interpersonal behaviours as seen in dysphoria and anger as well as dissociation; and in interpersonal behaviours that are aggressive or dependant as well as those that are distant and avoidant” (Cloitre et al., 2009, p. 2). These self-regulatory deficits have profound emotional and behavioural consequences that may directly be linked to offending behaviour.

1.5 Incidence of Developmental Trauma

Experience of single and multiple types of trauma appear quite common in both men and women (Finkelhor, 1994; Gorey & Leslie, 1997; MacMillan, 1997). There are a number of studies that have examined the community epidemiology
of developmental trauma and its consequent negative sequelae in adulthood. Reported prevalence rates vary significantly from study to study, for example Finkelhor (1994) reported a range of three percent to 36 percent for sexual abuse. However, there is consistent evidence that the prevalence rates are generally quite high. In a review of studies examining the prevalence of sexual abuse, Gorey and Leslie (1997) reported a 22.3 percent prevalence of sexual abuse among women and 8.5 percent prevalence among men when comparing 25 samples. The province-wide Ontario Health Supplement reported that 21 percent of women and 31 percent of men had experienced physical abuse during childhood (Scher, Forde, McQuaid & Stein, 2004).

Briere and Elliot (2003) examined the prevalence and psychological sequelae of childhood sexual and physical abuse in adults from the general population. A national sampling service generated a geographically stratified, random sample of 1442 subjects from the United States, of who 935 participated. The authors found that 14.2 percent of men and 32.3 percent of women had reported a childhood history of sexual abuse. Results also indicated that 22.2 percent of men and 19.5 percent of women reported a childhood history of physical abuse. However, developmental trauma can only very rarely be thought of as a single variable, as the most commonly studied forms of such trauma, physical abuse and sexual abuse, often also involve neglect and psychological abuse. It has been hypothesised that neglect is often a precursor for such abuse (Lisak & Miller, 2003). Psychological abuse, a negative family environment, or both, are almost always a component of other forms of abuse, and it has been noted that the commonly cited sequelae of sexual and physical abuse may in fact be somewhat attributable to the psychological-family component. In homes where
such abuse and neglect are occurring, violence between parents is common. This introduces yet another variable; the impact on the child witnessing family violence (Lisak & Miller, 2003). Cloitre et al. (2009) assessed the relationship between accumulated exposure to different types of traumatic events and symptom complexity in clinical adult (N=582) and child (N=152) samples. The authors found that childhood cumulative trauma predicted an increase in symptom complexity in both the children and the adults. They concluded that developmental trauma significantly influences adult symptoms.

Not much is known about the prevalence and correlates of emotional abuse and neglect as most research into developmental trauma focuses on sexual and physical abuse. This is despite knowing that emotional abuse and neglect has the potential to result in long-term physical and psychological consequences (Scher et al., 2004). Consequently, information on the prevalence and correlates of emotional abuse and neglect is needed. The paucity of studies examining the prevalence of emotional and physical abuse in community or nationally representative samples prohibits meaningful comparisons (Scher et al., 2004). Further, there is a paucity of information on the prevalence and correlates of exposure to multiple forms of abuse. Most large-scale epidemiological studies report on one or two forms of abuse, usually physical and/or sexual abuse. Since there is evidence to suggest having been a victim of multiple forms of developmental trauma increases the risk for adverse physical and mental health outcomes (Felitti et al., 1998; Moeller, Bachmann, & Moeller, 1993; Mullen, Martin, Anderson, Romans, & Herbison, 1996), it seems important to obtain additional information on individuals who have experienced multiple types of developmental trauma (Scher et al., 2004).
Kisiel et al., (2014) examined the patterns of trauma exposure and symptoms in 16,212 children involved in the child welfare system. They found that the combination of both violent (physical and sexual abuse) and non-violent types of trauma (neglect and emotional abuse) was associated with significantly higher needs across all symptom clusters. These included symptoms related to physiological and affective dysregulation, attentional and behavioural problems, self and relational difficulties, post traumatic symptoms and functional impairment. These results suggest that those individuals who experience a combination of non-violent and violent interpersonal traumas have significant negative outcomes compared to other constellations of trauma, and exceed the cumulative effects of experiencing a single traumatic event.

The Childhood Trauma Questionnaire (CTQ) has become a leader in the field measuring adult recall of developmental trauma. The CTQ is a reliable, valid questionnaire assessing five types of developmental trauma (emotional abuse, emotional neglect, physical abuse, physical neglect and sexual abuse). Baker and Maiorino (2010) reviewed the empirical studies (69) that used the CTQ to identify methodological issues and community/clinical prevalence rates of developmental trauma. In the community samples, emotional abuse was present in 42.2 percent when using a minimum score of nine as the cut off. Thus in the community sample about two thirds of the sample endorsed at least a single item, four in ten reported at least low levels of abuse, and 17 percent reported at least moderate abuse and approximately 15 percent reported severe to extreme emotional abuse. By comparison, emotional abuse was present in 53.8 percent of the clinical cases when using a cut off minimum score of nine. Therefore, approximately two thirds of the clinical sample endorsed at least one in five of the
emotional abuse items, approximately half reported experiencing at least low levels of abuse, approximately one third reported moderate abuse and one third reported severe to extreme emotional abuse. Emotional neglect was reported to be present in 44.7 percent of cases when using 10 as the cut off. Therefore, over two thirds of the respondents endorsed at least a single item, four in ten reported low levels of neglect; approximately 15 percent reported moderate neglect and 13 percent reported severe to extreme experiences of emotional neglect. This is compared to the clinical sample that found emotional neglect present in 57.6 percent of cases when the cut off score was 10. Therefore eight out of ten respondents endorsed at least one of the five emotional neglect items, over half reported low levels, approximately a third reported moderate levels and 19 percent reported severe to extreme emotional neglect. The severe to extreme rates of endorsement for emotional abuse and emotional neglect are quite high and highlight the need for further exploration and attention (Baker & Maiorino, 2010).

Scher et al., (2004) explored the prevalence of different types of developmental trauma in a community sample. The participants were a representative sample of 967 adult men and women in metropolitan Memphis. The participants completed a telephone survey that included the CTQ. They found that the prevalence for the experience of any developmental trauma was approximately 30 percent for women and 40 percent for men. Of these participants, 13 percent reported having experienced multiple forms of trauma. With physical abuse, physical neglect and emotional abuse found to highly co-occur. Prevalence of individual developmental trauma type ranged from five percent for sexual abuse to almost 19 percent for physical abuse. Prevalence of
individual developmental trauma types for men ranged from two percent for sexual abuse to 22 percent for physical neglect. The most common combination of abuse type for men (9.1%) was physical abuse and physical neglect. Prevalence of individual forms of developmental trauma for women ranged from five percent for emotional neglect and seven percent for sexual abuse, to 17 percent for physical abuse. The most common co-occurring forms of developmental trauma among women were emotional abuse and physical abuse (10%).

1.6 Effects of Developmental Trauma

According to the founder of developmental trauma research, Van der Kolk (2005), most traumas begins at home, with the vast majority of people (approximately 80%) responsible for child abuse being the child’s own parents. As indicated above, research has shown that traumatic childhood experiences are not only extremely common, but also have a profound impact on many areas of functioning. Williams (2006) posits that children who grow up in an unpredictable place of violence and threat, live with fear and anguish, and adapt by becoming attuned to their abuser’s inner states. Realising that the powerful adult figure is dangerous and unavailable, they are in a frozen or hyper aroused state, unable to engage in social activities that might be able to soothe them. These profoundly disrupted relationships have devastating effects on the child’s development as well as alterations in his or her neurobiology (Williams, 2006).

Furthermore, Van der Kolk (2005) theorises that when children are unable to achieve a sense of control and stability, they become helpless. He posits that if children are unable to understand what is occurring and are unable to do anything to change it, they respond immediately to a fearful stimulus with
fight/flight/freeze response without being able to learn from the experience.

Subsequently, when exposed to reminders of trauma such as sensation, physiological states, images, sound and situations, they tend to behave as if they were being traumatised all over again (van der Kolk, 2005). According to van der Kolk numerous studies of traumatised children find problems with unmodulated aggression, impulse control, attention and dissociative problems, and difficulty negotiating relationships with caregivers, peers, and later in life, intimate partners. Many of these problems can be understood as efforts to minimise objective threat and to regulate their emotional distress. Unless people understand the nature of such re-enactments, they are likely to label the child oppositional, rebellious, unmotivated or antisocial (van der Kolk, 2005). This is particularly important when you consider that some of the children diagnosed with Conduct Disorder go on to develop Antisocial Personality Disorder that is often a dynamic risk factor characteristic of most offenders. These disorders will be discussed in more detail in Chapter Two.

A history of childhood physical and sexual assault is also associated with a number of psychiatric diagnoses in adolescence and adulthood. Sexual trauma, particularly sexual abuse that occurs in developmental years, has been found to be strongly related to the development of dissociative symptoms in adult clinical samples. It predicts both somatoform and psychoform dissociation whereas physical abuse predicts somatoform dissociation only (Dell & O’Neil, 2009). The numerous pathologies that are associated with the legacy of developmental trauma include substance abuse, borderline and antisocial personality, eating, dissociative, affective, somatoform, cardiovascular, metabolic, immunological
and sexual disorders (Van der Kolk, 2005). A number of these disorders will be discussed in further detail in Chapter Two.

Developmental trauma sets the stage for unfocused responses to subsequent stress, leading to dramatic increases in the use of medical, correctional, social and mental health services. According to Van der Kolk, (2005) chronic trauma often interferes with neurobiological development and the capacity to integrate sensory, emotional and cognitive information into a cohesive whole. Abused and neglected children suffer from a diminished sense of self. Cole and Putnam (1992) have proposed that without a complete sense of self a person is unable to regulate internal states including stress. Profound psychological trauma in the developing child has been shown to cause a form of amnesia that manifests in numbing and blocking of information and intrusive cognitions (Williams, 2006). In the case of child abuse, the victim is often psychologically and physically immature. His or her development is often seriously compromised by repetitive abuse and inadequate responses from caregivers on whom he or she relies for safety and protection (Courtois, 2008). This also has a profound impact on attachment and future interpersonal relationships as discussed below.

1.7 Attachment Theory

According to Bowlby’s attachment theory, early patterns of attachment affect the quality of information processing throughout life. Secure infants learn to trust both what they feel and how they understand the world (Bowlby, 1988). This allows them to rely on both their emotions and their thoughts to react to any given situation. Self-esteem, self-efficacy and a belief that one deserves to be loved and cared for consequently develops. Their experience of feeling understood provides them with the confidence that they are capable of making
good things happen and that if they don’t know how to deal with a difficult situation they can find people to help them find a solution (Van der Kolk, 2005). Secure children learn a complex vocabulary to describe their emotions such as love, hate, pleasure, disgust and anger. This allows them to communicate how they feel and to formulate efficient response strategies. They spend more time describing physiological states such as thirst and hunger, as well as emotional states when compared to abused children (Van der Kolk, 2005). This may account for the alexithymia that is often present within offenders (Kroner & Forth, 1995).

According to Lumley,

Neely and Burger (2007) alexithymia literally means “lacking words for feelings” and involves difficulty identifying feelings, difficulty describing feelings to others, externally orientated thinking and limited imaginal capacity.

As developmental trauma is often perpetrated by the child’s caregivers or responded to by the primary caregivers, one must consider the attachment implications (Van der Kolk, 2005). Children learn to regulate their behaviour by anticipating their care-givers response to them (Van der Kolk, 2005). This interaction allows them to construct what Bowlby called “internal working models”. A child’s internal working model is created by the internalisation of the affective and cognitive characteristics of their primary caregivers. As early experiences occur in the context of the developing brain, neural development and social interaction are inextricably intertwined (Van der Kolk, 2005). Although brain maturation and regulation are affected by lack of attachment, there are other variables that determine adaption to complex traumas. Children internalise interactions with caregivers that inform the nature of their future relationships (Bowlby, 1988). Representations of the self, through the working model of the
self and the working model of the world, act as maps for interpreting the behaviour of others. The working model of the world refers to one’s view of the other person and the ability to trust that the attachment figure can be relied on. The working model of self reflects one’s ability to see oneself as a lovable figure to the attachment figure and according to Bowlby’s theory of attachment these internalisations affect future relationships (Bowlby, 1988).

According to Williams (2006) the insecure pattern of attachment learned by a victim of trauma also shows problems in affect regulation. Alternatively, negative traumatic events can impact on a person’s self-concept, which can also affect future relationships. Under most circumstances, parents are able to help their distressed child to restore a sense of safety and control. When trauma occurs in the presence of a supportive caregiver, the child’s response is likely to mimic that of the parent. As such, the more disorganised the parent, the more disorganised the child. However, if the distress is overwhelming, or when the caregivers themselves are the source of the distress, pre-adolescent children are unable to modulate their arousal. When caregivers are emotionally absent, inconsistent, violent, intrusive, or neglectful, children are likely to become intolerably distressed and are unlikely to develop a sense that the external environment is able to provide relief. Thus, according to Van der Kolk (2005) children with insecure attachment patterns have trouble relying on others and are unable to regulate their emotional states. As a result, they experience excessive anxiety, and anger and a longing to be taken care of (Van der Kolk, 2005).

When chronically traumatised children are left to their own devices, deficits in emotional self-regulation are evident. This results in developmental and adult problems with self-definition as reflected by a lack of a continuous self, poorly
modulated affect and impulse control, including aggression against self and others, and uncertainty about the reliability and predictability of others, expressed as distrust, suspiciousness and problems with intimacy resulting in social isolation (Van der Kolk, 2005; Poythress, Skeem & Lilienfeld, 2006).

Individuals with disorganised attachment may perceive others as unpredictable resulting in conflict and distress in relationships. This is problematic as it means that the person has no external framework to help regulate affect as they are unable to be soothed by others. To further complicate matters, these individuals are unlikely to engage in relationships in a way that enables others to consistently and accurately respond to and mirror his/her identity (Dell & O’Neil, 2009).

Typically, these individuals’ self-concept is so confused that at any given time they may be unsure of their wants and needs which results in loved ones not being able to provide constant and stable responses.

The ability to integrate and adapt to the violence, abuse and horror in one’s life determines mental, functional and behavioural outcomes. Studies show that early social support and secure attachment may predict mental, functional, and behavioural outcomes. Increased familial support after a traumatic event has been found to decrease PTSD symptoms (Dixon, Howie & Starling, 2005). The ability to mobilise help and support, and to recreate relatedness and attachment to others and the self after a trauma is essential (Williams, 2006). According to Bowlby’s attachment theory, healthy attachment to a care giver promotes self-regulation toward negative and positive stimuli and mediation of stress throughout one’s life (Bowlby, 1988). At all ages, secure attachment can create resilience and help buffer an individual against the worst effects of trauma. Resiliency refers to being capable of returning to an original form (Williams, 2006). This has a potential to
be a protective factor to those individuals whose trauma has been perpetrated outside the family home. Without this resiliency and secure attachment many potential psychiatric consequences can occur. Particularly relevant to the aftermath of trauma is the diagnosis of Post-Traumatic Stress Disorder that will be discussed in the proceeding chapter (McMackin, Leison, Cusack, LaFratta & Litwin, 2002).

1.8 Chapter Summary

This chapter outlined the high incidence of trauma and developmental trauma. This is concerning given the potential long term impacts of such a legacy, including relational, emotional and impulse deficits, behavioural problems and psychopathology. Potential psychiatric disorders that might stem from trauma will be discussed in the following chapter. These conditions place a significant burden on community resources to support affected individuals, both at a service level (community, hospital, mental health) as well as a legal level (courts, prisons, victims of crime compensation).
Chapter 2 Psychopathology

2.1 Chapter Overview

As discussed in the previous chapter, there is a number of psychiatric disorders that have been linked to the experience of trauma generally and developmental trauma specifically. Due to the acting out behaviours such as aggression, vandalism and self-harm that are often seen in children experiencing developmental trauma, it is important to present criteria for conduct disorder. As adults, these children often go on to develop other psychopathologies such as Antisocial Personality Disorder and more commonly PTSD and CPTSD. Consequently, this chapter will discuss these disorders in detail and also consider assessment and diagnostic issues relevant to PTSD and CPTSD.

2.2 Conduct Disorder and Antisocial Personality Disorder

According to the DSM-5, Conduct Disorder is characterised by a repetitive and persistent pattern of behaviour in which the basic rights of others or major age-appropriate societal norms or rules are violated (APA, 2013). The course of Conduct Disorder is variable. In the majority of individuals, the disorder remits by adulthood. However, substantial proportions (40%) continue to show behaviours in adulthood that meet the criteria for Antisocial Personality Disorder (ASPD) (Mash & Wolfe, 2002). Antisocial Personality Disorder is defined by a set of criteria that describe a range of criminal behaviours and cognitions. It is intended to represent an enduring pattern of inner experience and behaviour that deviates markedly from the expectations of one’s cultural and social context. In order for a diagnosis of ASPD there must have been evidence of conduct disorder prior to the age of 15 years and into adulthood involving a repetitive and persistent pattern of behaviour in which the basic rights of others, or major age
appropriate societal norms or rules, are violated. The pervasive pattern is indicated by three or more of the following: (1) failure to conform to the social norms with respect to lawful behaviours, as indicated by repeatedly performing acts that are grounds for arrest; (2) deceitfulness, as indicated by repeated lying, use of aliases, or conning others for personal profit or pleasure; (3) impulsivity or failure to plan ahead; (4) irritability and aggressiveness, as indicated by repeated physical fights or assaults; (5) reckless disregard for safety of self and others; (6) consistent irresponsibility, as indicated by repeated failure to sustain consistent work behaviour or honour financial obligations; and (7) lack of remorse, as indicated by being indifferent to or rationalising having hurt, mistreated, or stolen from another (APA, 2013). Another primary diagnosis that is often associated with the experience of trauma is PTSD.

2.3 Post Traumatic Stress Disorder (PTSD)

According to The Australian Guidelines for the Treatment of Adults with Acute Stress Disorder and Post Traumatic Stress Disorder (Australian Centre for Post Traumatic Mental Health, 2007), lifetime prevalence of PTSD in community samples range between five and ten percent. Reports of 12 month prevalence of PTSD vary between 1.3 percent in Australia and 3.9 percent in the United States. According to Nemčić-Moro, Francisković, Britvić, Klarić, and Zecević (2011) the prevalence of PTSD in the general population is estimated to be between one and 14 percent. Furthermore, the prevalence rate for victims of crime is estimated to be about 25-28 percent, with higher rates (45-60%), for interpersonal crimes such as rape of women. In an Australian representative sample, it was found that 5.4 percent of women reported experiencing rape and 10.2 percent reported molestation. Of those who reported that the most traumatic
event they had experienced was rape, 9.2 percent met the criteria for PTSD in the last 12 months.

Males who were raped also reported a higher prevalence of PTSD (ACPMH, 2013).

The DSM-IV-TR criteria for diagnosing PTSD required that the person being exposed to a traumatic event, had both the following present: (1) the person experienced, witnessed or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of the self and others, and (2) the person’s response involved intense fear, helplessness, or horror (APA, 2000). A diagnosis of PTSD was warranted when an individual experiences the development of three symptom clusters (re-experiencing, avoidance, hyper arousal) following a traumatic event. Re-experiencing involves the persistent and intrusive thoughts and feelings about the traumatic event. Avoidance is characterised by refraining from stimuli that act as reminders of the traumatic event or numbing of feelings and dissociation of thoughts related to the trauma. Hyper arousal is a heightened physiological response involving increased startle reflex and hyper vigilance (Weis, 2010). According to the DSM-IV-TR, the following associated constellation of symptoms may occur and are more commonly seen in association with an interpersonal stressor (e.g., childhood sexual or physical abuse): impaired affect modulation, self-destructive and impulsive behaviour, dissociative symptoms, somatic complaints, feelings of ineffectiveness, shame, despair, or hopelessness, feeling of being permanently damaged, a loss of previously sustained beliefs, hostility, social withdrawal, feeling constantly threatened, impaired relationships
with others, or a change from the individual’s previous personality characteristics (APA, 2000).

More recently, the DSM-5 listed the following diagnostic criteria for Posttraumatic Stress Disorder (PTSD): (A) Exposure to actual or threatened death, serious injury, or sexual violence by directly experiencing the traumatic event(s), witnessing, in person, the event(s) as it occurred to others, learning that the traumatic event(s) occurred to a close family member or friend, experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse); (B) Presence of intrusion symptoms; (C) Persistent avoidance of stimuli associated with the traumatic event; (D) Negative alterations in cognitions and mood associated with the traumatic event; (E) Marked alterations in arousal and reactivity associated with the traumatic event. The duration of the above symptoms must be for at least one month and cause clinically significant distress and impairment of global functioning (APA, pp. 271-274, 2013).

Traumatic events predisposing to PTSD typically combine fear with a high degree of helplessness (Anders et al, 2003). As many crimes constitute traumatic stressors, crime victims/survivors are at risk of developing PTSD (Carlson & Dutton, 2003). However, the exposure to a psychologically distressing event that is beyond the realm of ordinary human experience is not sufficient to warrant the development of PTSD. Many individuals endure exceptionally traumatic experiences with few, if any, complications. Conversely, other individuals experience comparatively mild trauma and develop severe PTSD (Saigh, 1992). Several factors have been associated with an increased risk
of developing PTSD following trauma exposure. These include background variables such as childhood trauma, comorbid mental health problems, family instability and substance abuse. There is also evidence to suggest that females are at greater risk than males of developing PTSD following trauma which may be attributed to the gender differences in coping discussed in Chapter One (Roxburgh, Degenhardt & Copeland, 2006). Continued exposure to trauma is another risk factor for the development of PTSD, with previous research suggesting that the longer the exposure, the more persistent and/or severe PTSD symptoms will be (Roxburgh et al., 2006).

Post-Traumatic Stress Disorder is commonly associated with anger, guilt, dissociation, marked functional impairments, diminished quality of life and physical health problems (ACPMH, 2013). According to Carlson and Dutton (2003), crime victims/survivors who develop PTSD are at risk of developing other psychological disorders as well. PTSD is associated with increased rates of Major Depressive Disorder, Substance Related Disorders, Panic Disorders, Agoraphobia, Obsessive Compulsive Disorder, Generalised Anxiety Disorder, Social Phobia, Specific Phobia, and Bi-Polar Disorder (see Chapter Three for a detailed discussion on Substance Use Disorders). These disorders can precede, follow, or emerge concurrently with the onset of PTSD (APA, 2000). However, Paton et al. (2009) argue that there is a problem with the term ‘trauma’ in that it has become overly determined, as it is associated with psychiatric diagnosis. According to Paton et al. (2009), a PTSD diagnosis does not adequately describe the complexity of how people react to overwhelming experiences, and thus, focusing solely on PTSD to describe the experience of trauma does not sufficiently address the complexity of the experience. Many
researchers have argued that developmental trauma is more consistent with presentations of complex trauma rather than PTSD (Paton et al.; Van der Kolk, 2005).

2.4 Complex Post Traumatic Stress Disorder

As complex trauma is often a better representation of the aftermath of developmental trauma and describes the long term trajectories associated with emotional regulation deficits, it is useful to describe it here in more detail. Herman (1994) first coined the term ‘complex trauma’ when he described a combination of post traumatic factors that damage attachment and self systems. These factors are in addition to more usual post traumatic changes to biological and psychological functioning. The experience is defined by four characteristics: (1) chronic/prolonged duration, (2) disruption of self-capacities in the individual, including self-development and self-regulation that are likely to be; (3) interpersonal in nature and (4) early onset (Lee, 2012). Complex trauma refers to a type of trauma that occurs repeatedly and cumulatively, usually over a period of time and within specific relationships (familial) and contexts. The term came to be accepted as researchers found that some forms of trauma were much more pervasive and complicated than others. The prototype trauma for this change in understanding was child abuse (Courtois, 2008). The traumatic stress field adopted the term ‘complex trauma’ to describe the experiences of multiple, chronic and prolonged, developmentally adverse traumatic events, most often of an interpersonal nature with early life onset. These exposures often occur within the child’s care giving system and include physical, emotional and educational neglect and child maltreatment beginning in early childhood (Van der Kolk, 2005).
There are a number of terms that have been used to describe chronic interpersonal trauma; type II trauma (Terr, 1991), CPTSD (Herman, 1994), developmental trauma disorder (Van der Kolk, 2005), disorders of extreme distress not otherwise specified (DESNOS; Pelcovitz et al., 1997) and complex developmental trauma (Briere & Spinazzola, 2009; Collings, 2013). Currently both DESNOS and CPTSD are referred to in the clinical literature interchangeably (Centre for Addiction and Mental Health, 2003). Consequently, the term used in subsequent text will reflect the authors’ preferred term.

Individuals with the above conditions typically present with additional symptoms to PTSD including: impaired emotional control, self-destructive and impulsive behaviour, impaired relationships with others, hostility, social withdrawal, feeling constantly threatened, dissociation, somatic complaints, feelings of ineffectiveness, shame, despair or hopelessness, feeling permanently damaged, and a loss of prior beliefs and assumptions about their safety and the trustworthiness of others (Poythress et al., 2006). Chronic self-harm and/or suicidal ideation is also more common among these individuals. Those who exhibit these issues are often referred to as having CPTSD or DESNOS. While these conditions are not included in the DSM-IV-TR or DSM-5, the ICD-10 includes a category for Enduring Personality Change after Catastrophic Experience, which closely resembles these features. It is not yet known how the ICD-11 will incorporate these constructs (ACPMH, 2013).

Complex PTSD is the clinical label used to denote post traumatic symptoms associated with chronic experiences of interpersonal traumas. Symptoms can include: (1) severe affect dysregulation involving self-destructive and risk taking behaviours such as suicidality, alcohol and other drug use and the victimisation of
others, (2) pathological dissociation such as transient episodes of depersonalisation, derealisation and dissociative amnesia and (3) psychosomatic complaints. These symptoms were listed as associated features of PTSD in the DSM-IV-TR; however, in the DSM-5, affect dysregulation has been included as a criterion and depersonalisation, derealisation has been added as specifiers. Interestingly somatic symptoms have been excluded in the new edition and amnesia has been captured under the criteria of negative alterations in cognitions and mood (Lee, 2012).

The criteria for the diagnosis of DESNOS include six aspects of self-regulation and psychosocial functioning that have been altered due to trauma. These include: (1) affect and impulse regulation (e.g., difficulty modulating anger, fear, shame, risky behaviour, self-harm behaviours), (2) somatic self-regulation (e.g., pain or physical symptoms that cannot be accounted for medically), (3) consciousness (e.g., dissociation), (4) self-perception (e.g., shame, guilt, or seeing the self as damaged or ineffective), (5) relationships (e.g., difficulty trusting others, being revictimised, avoiding sexuality), and (6) systems of meaning (e.g., hopelessness, loss of faith) (Dell & O’Neil, 2009). Ford and Courtois (2009) acknowledged that DESNOS cannot possibly reflect the full range of psychopathology that can result from exposure to complex trauma; however, they concluded that “DESNOS appears to be the most efficient and well-articulated approach to describing the sequelae of complex trauma as a single syndrome for adults” (p. 24). In particular dissociation and somatic complaints appear to be differentiating factors when comparing PTSD and CPTSD.
Dorahy et al. (2015) posit that borderline symptoms, positive schizophrenia symptoms and the pathological manifestations of dissociation may discriminate those with severe dissociative disorders from those with dissociative PTSD. There appears to be a high prevalence of positive schizophrenic, borderline and dissociative symptoms in severe dissociative disorders, however there are limited studies that have used developmental trauma related PTSD comparison groups whose abuse severity was similar to the dissociative disordered group. Dorahy et al. “in press” found that dissociative disordered and chronic PTSD samples had similar experiences and severity of developmental trauma except sexual abuse, which was found to occur more frequently in the dissociative group. It is possible to conclude that higher levels of pathological dissociation is associated with sexual abuse and results in more severe psychopathology (Dorahy et al., 2015).

Post traumatic dissociative symptoms involve dysregulation in several biological systems that contribute to the occurrence of impulsive aggression: (1) glutamate release, (2) brainstem, midbrain, and limbic (hippocampal) areas that are specifically related to the intensity of flashbacks and (3) prefrontal, anterior cingulate, hippocampus and midbrain structures that are responsible for pain tolerance, impulse control, problem solving, focused attention and appetitive behaviour that has been found to be specifically related to self-harm. Somatoform dissociation involves dysregulation of central nervous system areas that handle sensory processing and that infuse perceptions with self-awareness. Neuroimaging studies have linked acute dissociation, chronic post traumatic dissociation and alexithymia to the same cortical-limbic brain areas. These neuroimaging findings are consistent with a binary model of the somatic component of DESNOS. That is, somatic symptoms in DESNOS involve both
somatisation and “animal defences” of somatoform dissociation (Dell & O’Neil, 2009).

There are a number of diagnoses associated with complex trauma, such as Borderline Personality Disorder (BPD) and dissociative disorders. However, when these diagnoses are given, clinicians tend to neglect the traumatic experiences that resulted in the development of these individuals’ impaired self-captures and how their symptoms are often complex adaptions to cumulative experiences of abuse and betrayal (Lee, 2012). Dissociation may function as a defence mechanism aimed to facilitate coping processes. This occurs by providing temporary distance from painful emotions to mobilising cognitive coping resources to providing complete psychological unawareness to escape overwhelming stress and trauma seen in peri traumatic dissociation (Lee, 2012). Depersonalisation, derealisation and dissociative amnesia are all forms of pathological dissociation that theoretically make up the core dissociation domain of DESNOS. These symptoms are qualitatively distinct from emotional numbing that is considered to be the form of dissociation associated with PTSD (Lee, 2012). While exposure to developmental trauma increases the risk of developing Complex PTSD as an adult, it’s important to note that many survivors will not develop this condition or other dissociative disorders. The psychobiological effects of developmental trauma may manifest in other conditions such as depression or generalised anxiety disorder (Dell & O’Neil, 2009).

Trauma is the result of people’s adaptability to their experience of events. Some people have developed resilience that enables them to continue functioning and others find that their social, psychological and biological equilibrium is damaged (Williams, 2006). When exposure to a catastrophic or violent event does
not allow a person to resume living an undisrupted life, or if the type of trauma is both repetitive and cumulative, the result will be persistent complex manifestations that affect psychological, social and biological systems (Williams, 2006). According to Quina and Brown (2007), persons with complex trauma are likely to have serious challenges with affect regulation and self-soothing, are more likely to utilise dissociation of some form as a survival strategy, and in general experience difficulties across a range of functional aspects.

Research on a variety of populations and in a variety of settings has found support for the hypothesis that early interpersonal trauma, especially childhood abuse, predicts a higher risk for developing CPTSD/DESNOS than accidents and disasters (Courtois, 2008). The prevalence rates of DESNOS have been explored in a variety of different populations: one percent in female students, two percent in the individuals exposed to war compared to approximately 57 percent of war veterans (Nemčić-Moro et al., 2011). The researchers of the above meta-analysis also found that of the participants with CPTSD, 31 percent also met criteria for PTSD. Additionally, it appears as though the prevalence of PTSD does not differ between the general community and treatment seekers. Approximately half of the individuals seeking treatment for PTSD also meet criteria for DESNOS which suggests that symptoms of DESNOS, more so than symptoms of PTSD result in treatment seeking behaviours (Nemčić-Moro et al., 2011). Zlotnick et al. (2004) also found a positive correlation between PTSD intensity and meeting DESNOS criteria (Nemčić-Moro et al., 2011). Ford (1999) associated DESNOS with extreme levels of intrusive flashbacks and intense use of psychiatric services, which may account for the high comorbidity found in treatment seekers.
Some individuals exposed to trauma during development suffer from a variety of psychological problems not included in the diagnosis of PTSD, including depression, anxiety, self-hatred, dissociation, substance abuse, self-destructive and risk taking behaviours, re-victimisation, problems with interpersonal relationships (including parenting), medical and somatic concerns, and despair. Moreover, these problems are often characterised as comorbid conditions rather than being recognised as essential elements of complicated post traumatic adaptations (Courtois, 2008). Despite obvious advances in understanding post traumatic reactions, a number of researchers and clinicians argue that the diagnosis of PTSD is not a perfect fit for the reactions experienced by victims of child abuse and family violence and other populations where traumatisation occurred repeatedly and extensively. They noted that the criteria for PTSD had been derived directly from the study of adult male combatants exposed to war trauma. As a result, the reactions of those involved in combat, were likely significantly different from those of immature individuals whose exposure to traumatic stress was ongoing and related to family life (Courtois, 2008).

The diagnostic conceptualisation of CPTSD/DESNOS presented by Courtois (2008), and briefly mentioned previously, consists of seven different problem areas that have been shown by research to be associated with early interpersonal trauma:

1) Alterations in the regulation of affective impulses, including difficulty with modulation of anger and self-destructiveness. This category includes all methods used for emotional regulation and self-soothing, including
addictions and self-harming behaviours that are paradoxically, often lifesaving.

2) Alterations in attention and consciousness leading to amnesias and dissociative episodes and depersonalisation. This category includes emphasis on dissociative responses different from those found in the DSM criteria for PTSD. Its inclusion in the CPTSD conceptualisation incorporates the findings that dissociation tends to be related to prolonged and severe interpersonal abuse occurring during childhood. Additionally, it recognises that children are more prone to dissociation than are adults.

3) Alterations in self-perception, such as a chronic sense of guilt, responsibility and ongoing feelings of intense shame. Chronically abused individuals often incorporate the lessons of abuse into their sense of self and self-worth.

4) Alterations in perception of the perpetrator, including incorporation of his or her belief system. This criterion addresses the complex relationships and belief systems that ensue following repetitive and premeditated abuse at the hands of primary caretakers.

5) Alterations in relationship to others, such as not being able to trust and not being able to feel intimate with others. Another lesson of abuse internalised by victims/survivors is that people are venal and self-serving, out to get what they can by whatever means including abusing/using others.

6) Somatisation and/or medical problems. These somatic reactions and medical conditions may relate directly to the type of abuse suffered and any physical damage that was caused or they may be more diffuse. They have been found to involve all major body systems.
Alterations in systems of meaning. Chronically abused individuals often feel hopeless about finding anyone to understand them or their suffering. They despair of ever being able to recover from their psychic anguish.

### 2.5 Assessment of Complex PTSD

Whilst there is a number of psychometrics that can be utilised to assess specific symptoms of CPTSD, the Structured Interview for Disorders of Extreme Stress (SIDES) is the only psychometric that assesses the full constellation of symptoms present in CPTSD. In its early development, the SIDES had 48 items that were derived from a comprehensive review of the literature on the reactions to extreme stress and in consultation with approximately 50 experts in the field. The 48 items were initially categorised into seven broad domains: (1) alterations in regulation of affect and impulses, (2) alterations in attention and concentration, (3) alterations in perception, (4) alterations in perceptions of the perpetrator, (5) alterations in relationships with others, (6) somatisation, and (7) alterations in systems of meaning. For the purpose of the DSM-IV field trials, the items were organised into a structured interview that assessed both current and lifetime presence of symptoms in each of the seven domains. Cut off points for domain endorsement were established and used to identify items that significantly discriminated survivors of interpersonal violence from survivors of disaster. Due to sporadic endorsement and low levels of consistency, domain five (alterations in perceptions of the perpetrator) was excluded. As a result, a 45 item, six domain scale (SIDES-SR) self-administered version of the SIDES was developed (Lee, 2012; Collings, 2013).

The SIDES-SR (Trauma Center, 2002) assesses individuals’ past and current functioning on six dimensions: (1) affect dysregulation, (2) amnesia and
dissociation, (3) somatisation, (4) disruptions in self-perception, (5) disorders in relationships with others, and (6) disrupted system of meaning. There are two scores for each symptom, lifetime presence and presence of symptoms during the past month. Lifetime presence is rated as a yes/no dichotomy whereas the presence of symptoms during the last month is rated on a four point scale where a score of one is considered subclinical, two is considered clinical and three is considered severe. This approach to scoring was based on the Structured Clinical Interview for the DSM-IV-TR (SCID). DESNOS domain symptom severity is ascertained by summing the items of each domain which is the recommended approach to scoring when using the self-report version. The internal consistency properties of the SIDES-SR have been found to be adequate, where the full-scale internal consistency was high (α = 0.93) and the five domain subscales demonstrated internal consistently (α = 0.74 to 0.82). Only the somatisation domain subscale demonstrated somewhat weak internal consistency (α = 0.68) (Centre for Addiction and Mental Health, 2003; Dell & O’Neil, 2009; Lee, 2012).

The SIDES has been used to assess for DESNOS in midlife and older adult community samples, inpatient and outpatient samples and mental health samples. It has been found to be reliable with convergent and discriminate validity in clinical, high risk and community samples (Dell & O’Neil, 2009). Lee (2012) aimed to establish the convergent and concurrent validity for DESNOS using the self-report SIDES-SR. The internal consistency of the overall scale was good at α = .929 and the subscales were also adequate (α = .697 to .845). Lee (2012) found convergent validity for the Affect Dysregulation and Dissociation/Amnesia domains. Concurrent validity was found due to the significant association of DESNOS symptom severity with the cumulative exposure to interpersonal
traumas. However, dissociation was not found to be uniquely associated with cumulative interpersonal trauma (Lee, 2012). The authors of the instrument (Spinazzola, Blaustein, Kisiel, & Van der Kolk, 2001) explain that research to date on the SIDES has been focused on whether it works as a baseline measure of CPTSD and symptom severity. Consequently, it is not yet known whether it will be useful as a measure of treatment outcome (Centre for Addiction and Mental Health, 2003).

Lee (2012) furthered empirical evidence with a study where DESNOS was shown to be mostly associated with developmental physical and sexual abuse (38% of variance in DESNOS symptom severity). Results also indicated that interpersonal violence experienced in adulthood contributed to an additional 17 percent of variance to DESNOS symptom severity. According to Lee this finding supports the notion that DESNOS symptom severity is mostly associated with chronic experiences of interpersonal trauma during childhood. Further, Lee concluded that the results indicate that adult interpersonal traumas contribute to DESNOS symptom severity over and beyond childhood traumas, demonstrating the insidious effects of complex trauma on the psyche even when experienced at later stages of life. Lee’s findings were consistent with those found by Cloitre et al., (2009) in a study with 582 women investigating the cumulative effects of childhood and adult interpersonal traumas on symptom complexity. From their results, Cloitre et al. (2009) concluded that the effects of childhood and adult trauma have an additive function to symptom complexity.

Cloitre et al. (2009) advocated for the inclusion of a CPTSD diagnosis in the DSM to avoid multiple diagnoses. They argued that assigning multiple diagnoses to a person increases the risk of stigmatisation. Further, they argued
that the presence of multiple diagnoses complicates treatment planning and
 provision amongst service providers. Conversely, the diagnostic criterion of
 CPTSD offers an empirically based, conceptually coherent and unified set of
 symptoms that will reduce the need for multiple diagnoses of disorders unrelated
to trauma. It has the potential to simplify clinical judgement and can guide
treatment planning. In order to test these proposals, research would need to be
conducted into the strengths and specificity of the relationship between childhood
trauma and CPTSD compared to other disorders and determine the predictive
power of a single diagnosis (CPTSD) compared to multiple disorders relative to
functional impairment or other outcome variables (Cloitre et al., 2009).

Support for a diagnosis of CPTSD, although not yet incorporated into the
DSM-5, except as an associated feature of PTSD, is growing (Centre for
Addiction and Mental Health, 2003; Lee, 2012). A number of clinicians have
observed over the years that these adult survivors of childhood abuse present with
complex symptom pictures, including engaging in many high risk situations (self-
harm, suicidality, risk taking, addictions) as well as evidencing impairments in
their ability to regulate their emotions to avoid re-victimisation, and to stay
connected in a therapeutic relationship (Courtois, 2008). Emotional lability,
relational instability, impulsivity, and unstable self-structure are symptoms
associated with borderline personality disorder, a diagnosis that has come to be
understood as a post traumatic adaption to severe childhood abuse and attachment
trauma (Courtois, 2008). It seems that CPTSD is an unlikely diagnosis to be
included in future editions of the DSM despite findings that support this condition
being a viable framework that aids in the organisation and understanding of the
long term impact of interpersonal trauma in clinical research (Lee, 2012).
Consequently, while CPTSD continues to be excluded from the DSM, trauma survivors will continue to be potentially misdiagnosed with a variety of other disorders such as Borderline Personality Disorder.

2.6 Chapter Summary

The evidence provided above argues for discrete diagnosis that captures the compilations of symptoms that appear to be associated with experiencing developmental trauma. Having CPTSD included in the DSM will eradicate multiple diagnoses, assessment and treatment confusion. Provision of this diagnosis will better inform treatment to ensure that all complex symptomatology is being targeted. Among the strategies for coping with severe, unavoidable abuse is dissociation in its many forms. Dissociative coping strategies are means of not knowing, not feeling, and not being present with intolerable physical and emotional pain. Dissociation is a common component of the complex trauma response and one behaviour serving as a dissociative coping strategy is substance use, which will be discussed in detail in the following chapter (Quina & Brown, 2007).
Chapter 3: Substance Use, Trauma and Offending

3.1 Chapter Overview

The previous chapter explored the common psychopathologies that result from trauma as well as having alluded to many others that often manifest instead of or alongside these. This chapter will explore one such condition, substance use disorders in depth. Comorbidity between alcohol and other substance use disorders and trauma and the relationship between alcohol and other drugs and offending behaviours has been well documented and established. Within this chapter, the diagnostic criteria for substance use disorders will be presented prior to an exploration of prevalence statistics pertaining to comorbidity. Further, this chapter will attempt to link alcohol and other drug abuse with the experience of trauma, subsequent post traumatic psychopathology and offending.

3.2 Substance Use Disorders (SUD)

Due to the emotional pain caused by developmental trauma and the emotional regulation deficits present in many victim/survivors of developmental trauma, it is unsurprising that substance use disorders are over represented in this population. The link between trauma exposure and SUD is well established (Khoury et al., 2010). The National Survey of Adolescents found that teenagers who had experienced developmental trauma (physical and/or sexual) were three times more likely to report previous or current substance abuse compared to those adolescents without trauma exposure. However, the potential differential role of the type of developmental trauma on alcohol and other drug abuse still remains unclear (Khoury et al., 2010). It is possible that developmental trauma may increase the risk of developing SUDs in an attempt to self-medicate or alleviate mood symptoms associated with a dysregulated biological stress response.
Conversely, the early adolescent onset of substance abuse may further disrupt the biological stress response by increasing plasma cortisol levels. This increase may also contribute to the risk of developing PTSD and other mood disorders (Khoury et al., 2010).

According to the 2007 Australian National Mental Health and Well Being (Creamer, Burgess, & McFarlane, 2001) on the general community, men are more than twice as likely as women to have substance use disorders (11% compared with 4%) in the general population. Young men were particularly prone to substance use disorders, with 22 percent of those aged 18-24 being affected. Furthermore, alcohol use disorders were about three times as common as drug use disorders. The prevalence of SUD dramatically increased with comorbid conditions such as PTSD. Epidemiological data drawn from the Australian National Mental Health and Well Being study found that of those who met the criteria for PTSD, 37 percent of men and 12 percent of women also met the criteria for alcohol abuse/dependence and 22 percent of men and 15 percent of women met the criteria for drug abuse/dependence (Teesson & Proudfoot, 2003). Furthermore, a large number of clients in alcohol and other drug abuse treatment have current PTSD, estimated at 33-59 percent in women and 12-34 percent in men (Najavitis, 2002).

Khoury et al. (2010) conducted a study aimed at exploring the relationship between developmental trauma, PTSD and SUD in a community sample. The researchers measured substance use as a continuous variable to take into account frequency, duration and amount. They also assessed PTSD with the use of the Modified PTSD Symptom Scale (MPSS) and examined total scores as well as symptom cluster scores. Of the 587 participants, a significant number had been
arrested (n=370), of whom 347 were jailed and 96 imprisoned, however, how jail
and prison were differentiated is unknown. Khoury et al. found that cannabis was
the most common substance of abuse (44.8%) followed by alcohol (39%),
cocaine (34.1%) and then heroin/opiates (6.2%). In women, childhood sexual
abuse was found to be significantly and positively correlated to lifetime cocaine
and cannabis use (r = 0.235, r = 0.216). Childhood physical abuse in men was
found to be significantly and positively correlated to current cocaine and
lifetime/current heroin use (r = 0.190, r = 0.352). Whereas, childhood physical
abuse in women was significantly and positively correlated to lifetime cocaine
and cannabis use (r = 0.155, r = 0.196). Childhood emotional abuse in men was
found to be significantly correlated to current heroin abuse (r = 0.285), whereas in
women it was linked to lifetime cocaine use (r = 0.140) (Khoury, et al., 2010).

According to the DSM-IV-TR (2000), Substance Use Disorders could be
split into two categories, Substance Dependence and Substance Abuse. The
essential feature of Substance Dependence was a cluster of cognitive, behavioural
and physiological symptoms whereby the individual continues to use the
substance despite significant problems. The essential feature of Substance Abuse
is a maladaptive pattern of substance use manifested by recurrent and significant
adverse consequences related to the repeated use of substances (APA, 2000).
More recently though, according to the Diagnostic Statistical Manual (DSM-5),
substance related disorders encompass ten separate classes of drugs that can be
divided into two groups: substance use disorders and substance induced disorders.
Substance induced disorders include: intoxication, withdrawal, and other
substance/medication induced psychological disorders such as psychotic
disorders and sleep disorders. The DSM-5 is arranged to represent substance
disorders for each of the 10 substances (alcohol, caffeine, cannabis, hallucinogen, inhalant; opioid, sedative, hypnotic, or anxiolytic, stimulant, tobacco categories) and criteria are distinct for intoxication, withdrawal and induced disorders (APA, 2013). For example, Alcohol-Related Disorders involve five separate diagnoses: Alcohol Use Disorder, Alcohol Intoxication, Alcohol Withdrawal, Other Alcohol Induced Disorders and Unspecified Alcohol-Related Disorders (APA, 2013). The current thesis will explore substance use disorders as described in the DSM-IV-TR, without the specification of substance as participants were assessed prior to the release of DSM-5.

The diagnostic criteria for substance use disorders stipulates that the substance abuse must lead to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period: (1) the substance is often taken in larger amounts or over a longer period than intended, (2) there is a persistent desire or unsuccessful efforts to cut down or control substance use, (3) a great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects, (4) craving, or a strong desire or urge to use the substance, (5) recurrent use of the substance resulting in a failure to fulfil major role obligations at work, school, or home, (6) continued use of the substance despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of its use, (7) important social, occupational, or recreational activities are given up or reduced because of substance use, (8) recurrent use of the substance in situations where it is physically hazardous, (9) use of the substance use is continued despite knowledge of having a persistent physical or psychological problem that is likely to have been caused or exacerbated by the substance (APA, 2013).
According to the DSM-IV-TR and DSM-5, substance related disorders are also commonly comorbid with and complicate the course and treatment of many mental disorders such as Conduct Disorder in adolescents, Anti-Social and Borderline Personality Disorders, Schizophrenia and Bipolar Disorder (APA, 2000, 2013). Consequently comorbidity will be discussed below.

3.3 Dual Diagnosis (Comorbidity)

Comorbidity refers to having more than one physical or mental disorder at the same time. The literature on comorbidity has provided a number of consistent findings across studies. For example, it is not uncommon for people with severe substance use disorders to also experience anxiety, depression and/or personality disorder (Croton, 2007). Comorbidity between anxiety, affective and substance use disorders is very common with statistics indicating that around one quarter to half of those individuals meeting criteria for one mental disorder also meet criteria for another at some point in their lives, with the highest rates of comorbidity occurring between anxiety and affective disorders (Teesson, Slade & Mills, 2009). Specifically, one in five individuals with a substance use disorder also has an affective disorder and one in three individuals with a substance use disorder also have an anxiety disorder (Teesson et al., 2009). Comorbid substance use and mental health disorders are associated with a wide range of negative outcomes, including increased rates of relapse and rehospitalisation, legal problems, violence, treatment noncompliance, blood borne viruses, and family stress (Mueser, Drake & Wallach, 1998). Further, Comorbidity amongst mental health disorders has now gained recognition as being a widespread issue that is associated with poorer treatment outcomes, high levels of service demand and more severe disability (Graaff & Bruno, 2007).
Teesson et al. (2009) examined 12 month comorbidity using data from the National Survey of Mental Health and Wellbeing. Twelve month comorbidity has been associated with greater disability and a poorer treatment response even though treatment seeking is higher in these individuals. In terms of the prevalence of mental disorder comorbidity, 80 percent of the population had no diagnoses, 14.9 percent had one disorder, 4.4 percent had two disorders and 0.7 percent of the population had three disorders (anxiety, affective and substance use disorder). Overall, one in four people with a mental disorder was comorbid. Comorbidity rates were also consistently high in substance use disorders, whereby one in five also met criteria for an affective disorder and one in three met criteria for an anxiety disorder. Teeson et al. found that while affective and anxiety disorder comorbidity was the most common comorbidity for both sexes, females were more likely to experience this than males (3.9% compared to 2%). The second most common comorbidity for both sexes was a substance use disorder coupled with an anxiety disorder (females 0.8% compared with males 1.3%). The third most common comorbidity was substance use disorder coupled with an affective disorder (females 0.2% compared to males 0.6%). Interestingly both males and females were equally likely to have all three disorder categories. In relation to the association between mental disorder comorbidity and service use, two thirds of the people suffering from all three disorders had used services within the last 12 months (65.4% compared with those suffering from anxiety disorders only 27.3% and substance use disorders only 11.8%). These findings were similar to those reported in other large epidemiological surveys and can be attributed to gender differences in coping discussed previously.
In a qualitative study aimed to explore comorbid mental health and substance use, Graaff and Bruno, (2007) interviewed 914 intravenous drug using individuals across Australia (66% of the sample were male). They asked participants to indicate if they had experienced any mental health problems in the period up to six months prior to the interview. They found that affective disorders were the most commonly reported disorder (30%), followed by anxiety disorders (15%) and psychiatric disorders (7%). Whilst researchers were relying on self-reports rather than formal diagnoses, these rates are significantly higher than those of the general Australian population, which is consistent with other national and international studies that did utilise formal diagnoses (Degenhardt & Hall, 2001; Regier et al., 1990). They also found that those participants who had reported a recent mental health problem were more likely to be female, less likely to be injecting every day and more likely to be engaged in alcohol and other drug treatment compared to those who did not report a recent mental health problem. Further, among both men and women who reported a recent mental health problem, one third had not accessed any mental health treatment and this was the case regardless of whether or not they were involved in alcohol and other drug treatment or not. Regardless, reports of mental health problems were significantly more common amongst those who were involved in alcohol and other drug treatment than those who were not. This may suggest that among these participants: a) those experiencing higher levels of psychological distress presented for alcohol and other drug treatment, b) involvement in alcohol and other drug treatment facilitated the identification of mental health problems or c) some combination of both of these (Graaff & Bruno, 2007).
The above results suggest that involvement in alcohol and other drug treatment can operate as a gateway and subsequent treatment of mental health problems. It would therefore be reasonable to expect that individuals receiving alcohol and other drug treatment would also have access to mental health treatments; however, this was not the case. Participants were also asked about their drug use in the preceding six months. The results were consistent across those participants who had reported a mental health problem and those who did not, however there were two exceptions to this. The first involved a slightly lower frequency of heroin use amongst those reporting a mental health problem and more significantly there was a higher proportion of benzodiazepine use amongst those reporting mental health problems (77% compared to 62%) at a greater frequency (80 days compared to 25 days in the past 180 days). Whilst benzodiazepines can be used for the treatment of both substance use disorders and anxiety disorders, 42 percent of the participants had used these drugs illicitly (Graaff & Bruno, 2007). In terms of the patterns of substance use amongst participants with and without reported mental health problems 51 percent compared to 59 percent had used heroin, 83 percent compared to 77 percent had used amphetamines including methamphetamines, 77 percent compared to 62 percent had used benzodiazepines, 84 percent compared to 82 percent had used cannabis and 71 percent compared to 67 percent had used alcohol respectively (Graaff & Bruno, 2007).

According to Teesson and Burns (2001), there are three main theories regarding the relationship between substance use and mental illness. One of these involves the possibility that substance use leads to mental health problems, either through biological mechanisms such as regular methamphetamine use inducing a
psychotic illness or through environmental mechanisms such as situational stressors with limited access to coping resources. Another theory relates to the possibility that mental health problems lead to substance use, through disinhibition, and are a means to self-medicate or cope better with aversive mood states. The next theory denotes that mental health and substance use disorders co-occur due to predisposing biological or environmental factors (Graaff & Bruno, 2007; Mueser et al., 1998). Timing and relative age of onset is also important to consider when exploring comorbidity of PTSD and SUD. Much of the literature appears to support the claim that developmental trauma and subsequent PTSD precedes substance abuse. However, some researchers suggest that comorbid PTSD and SUD represent genetically mediated vulnerability to psychopathology after trauma exposure (Khoury et al., 2010).

The lifetime prevalence of PTSD in the general population is estimated to be 6.8 percent; however, in individuals with SUD, the lifetime prevalence of PTSD is significantly higher, ranging from 36-50 percent. Current prevalence rates for PTSD in individuals with co-occurring SUD ranges from 25 percent through to 42 percent (Jason et al., 2011; Tull, Gratz, Coffey, Weiss, & McDermott, 2013). This finding is clinically relevant, as research has found more severe negative clinical outcomes among people with co-occurring PTSD and SUD, compared to SUD alone. This is manifested by quicker relapse, more severe substance use following substance abuse treatment, more severe substance use patterns, higher rates of suicide attempts, more functional impairment, heightened rates of co-occurring Axis I and Axis II disorders, and greater utilisation of inpatient alcohol and other drug treatment (Jason et al., 2011; Tull et al., 2013). Ford, Russo, and Mallon (2007) found that individuals with PTSD are
between 1.4 and 4.5 times more likely to also meet criteria for SUD. In a study conducted by Brown, Stout, and Gannon-Rowley (1998), participants with comorbid PTSD and SUD reported that they perceived their SUD symptoms were more affected by their PTSD symptoms than the converse. This finding, while reliant on self-report, suggests that PTSD is the primary diagnosis. Conversely, Ford et al. also found that individuals with SUD are between 2.6 and 10.8 times more likely to have co-occurring PTSD. When individuals engage in high risk behaviours to facilitate their substance use, they are potentially exposed to traumatic events that can result in PTSD. The continued interaction with stimuli associated with the traumatic event or subsequent traumas will both activate and intensify PTSD symptoms (Weis, 2010).

It has been established that individuals with PTSD experience more intense and frequent negative affective states. This has clinical implications for individuals with comorbid PTSD and SUD as they are more likely to relapse in the context of negative affective states. Further confounding the issue is that some individuals have low distress tolerance. This results in difficulties withstanding intense and frequent emotional distress that often occurs in residential alcohol and other drug treatment. These clients are more likely to leave treatment prematurely to seek out substances in order to self-medicate this distress, or alternatively engage in maladaptive behaviours that result in them being removed from treatment (Tull et al., 2013). This inability to manage distress may also result in impulsive behaviours, which is consistent with the ego depletion model. This model posits that the capacity for self-regulation is a limited resource. Self-regulation can be described as a reduction in a person’s ability to logically regulate responses to goals, priorities and environmental demands (Jason et al.,
Consequently, any exposure to situations that require self-regulation will deplete this resource, temporarily limiting that persons’ capacity for self-control. These individuals are more prone to making impulsive decisions and demonstrate difficulty controlling maladaptive behaviours, which increases their risk of violating the conditions of treatment resulting in early termination (Tull et al., 2013).

Cerda, Sagdeo, and Galea (2008) explored the key patterns of comorbid psychopathology and posited that causal relationships can operate in both directions between mental health and substance use disorders. Examples include conduct disorder and depression increasing the likelihood of the development of a substance use disorder. The development of this disorder worsens the conduct and depressive disorders and persons with substance use disorders are at risk of developing depressive and anxiety disorders (Teesson et al., 2009). Literature suggests that the casual pathways between substance and mental health disorders may differ in direction, however, it is evident that substance use can complicate mental health treatment by reducing the efficacy of pharmacological intervention. Similarly, the presence of mental health conditions may reduce the efficacy of alcohol and other drug treatment (Graaff & Bruno, 2007). There are many theories of the development of SUDs, however particularly relevant to trauma and widely recognised and accepted amongst researchers and clinicians is that of the self-medication hypothesis.

### 3.4 The Self-Medication Hypothesis

The relationship between trauma and substance abuse is potentially multidetermined. Frequently, simple exposure and modelling are involved when a child is surrounded by substance abusing adults (Lisak & Miller, 2003). However,
there is also strong evidence for self-medication as a motivating factor leading from trauma to the use of substances. This suggests that post traumatic symptoms can function as a causal link between trauma and substance abuse (Lisak & Miller, 2003). The self-medication hypothesis emphasises that psychological pain is at the heart of addictive behaviour and that vulnerable individuals resort to their addiction because they discover that the addictive substance or behaviour gives short term and otherwise unobtainable relief, comfort, or change from their distress (Khantzian & Albanese, 2008). It further suggests that a person’s choice of substance or behaviour is because the substance or behaviour has a specific action or quality that relieves particular affective states that tend to be predominant in that individual (Khantzian & Albanese, 2008).

Research samples including combat victims (McFall, Mackay & Donovan, 1992), women affected by family violence (Kilpatrick et al., 1997), and inpatients (Gil-Rivas, Prause & Grella, 2009) have found associations between experiencing specific PTSD symptom clusters and the use of specific substances. The findings of these studies are important, as possible associations may indicate that specific substances are used to cope with specific post traumatic symptoms that further support the self-medication hypothesis and allow for the development of more effective interventions (Avant et al., 2011). Individuals with PTSD experience difficulties with self-regulation. Impairment of self-regulation can result in increased emotion distress, periods of dissociation, loss of trust in relationships and meaning in life and chronic somatic health problems. Further, the cognitive structures that are responsible for managing emotional responses become impaired in individuals exposed to extreme stress and who are dependent on substances (Jason et al., 2011). This impairment may affect decision making and
impulse control resulting in substance use and relAPAr. Waldrop, Back, Verduin
and Brady (2007) proposed that alcohol may have dampening effects that help
regulate the anxiety present in PTSD and that cocaine may increase
hypervigilence and self-confidence providing individuals with PTSD with a sense
of control (Jason et al., 2011).

To explore comorbidity symptoms, Saladin, Brady, Dansky, and Kilpatrick
(1995) compared 36 adults with PTSD who were cocaine dependant and 36 adults
with PTSD who were alcohol dependant. All participants were inpatients in a
substance abuse program. They found that the alcohol dependant adults
experienced more hyper arousal symptoms and sleep disturbances compared to
the cocaine dependent adults. However, there was an overlap on hyper arousal
symptoms and intoxication or withdrawal in both groups. According to Avant et
al., (2011), this finding makes it difficult to determine if the participants’ self-
report of hyper arousal symptoms relate to PTSD, substance use or both. McFall
et al. (1992) conducted a study involving 259 Vietnam veterans with PTSD. They
found that alcohol use was significantly correlated with PTSD hyper arousal and
re-experiencing symptoms whereas drug use was correlated with PTSD
avoidance in addition to hyper arousal and re-experiencing symptoms. The
limitation of this study was that the substances were not specified nor were their
temporal relationship assessed.

Leeies, Pagura, Sareen, & Bolton (2010) analysed data from the National
Epidemiologic Survey on Alcohol and Related Conditions Wave 2 (N=34,653)
and assessed self-medication among individuals with PTSD. They found that
21.4 percent of individuals with PTSD used substances in an attempt to alleviate
their symptoms and men were more likely than women to engage in this
behaviour. Specifically, they found that the prevalence of alcohol self-medication was 14.4 percent, whereas the prevalence for other drug self-medication was seven percent. Demographic data revealed that married individuals were least likely to self-medicate whereas those individuals who had never been married were 1.5 times more likely to self-medicate. Individuals with at least partial higher education were significantly more likely to self-medicate compared to those with less than a high school education. In addition to PTSD, Borderline Personality Disorder (BPD) and dysthymia were significantly and positively correlated with self-medication. This finding remained significant with the use of drugs after controlling for demographics and lifetime SUD. Self-medicating drug users with PTSD, BPD and dysthymia also had increased rates of previous suicide attempts. Conversely, those individuals who only used alcohol to self-medicate showed no differences in mental disorder comorbidity. These findings suggest that the use of drugs is likely to exacerbate the level of distress, which is the opposite intention of self-medicating behaviour (Leeies et al., 2010).

Given the high incidence of people experiencing trauma, the probability of psychopathology arising and then subsequent self-medication, more attention is needed to explore the patterns and function of these individuals alcohol and other drug use. Avant et al. (2011) found that 76 percent of the participants reported experiencing at least one traumatic event in their lifetime, with the most common traumas involving accidents and natural disasters. These participants were more likely to report non-experimental use of marijuana and a greater number of drinking days compared to those participants without trauma histories. Participants who potentially met criteria for PTSD tended to have a greater number of drinking days and significant non-experimental use of pain medication
compared to those participants who did not meet criteria for PTSD. Those participants who reported non-experimental use of depressants reported significantly more re-experiencing of symptoms compared to experimental or nonusers. Participants who reported non-experimental use of depressants and opiates reported significantly more avoidance and numbing symptoms compared to experimental or nonusers. Those participants who reported non-experimental use of opiates reported significantly more symptoms of hyper arousal compared to experimental or nonusers. Further, one quarter of the sample reported non-experimental misuse of prescription medication, which is a little lower than the Graaff and Bruno (2007) finding on the abuse of benzodiazepines.

The high rates indicated above and the association of several medications with trauma history and PTSD symptoms underline the importance of researchers focusing on this area in the future. While Avant et al. (2011) analyses regarding the associations between PTSD symptom clusters and specific substances was exploratory, it was hypothesised that stimulants would be associated with avoidance/numbing symptoms whereas depressant use would be associated with re-experiencing and hyper arousal symptoms; however, their findings were mixed. Re-experiencing symptoms were found to be associated with non-experimental depressant use; behavioural avoidance symptoms were associated with non-experimental depressant and hallucinogen use; and emotional numbing symptoms were associated with non-experimental depressant use. Further, hyper arousal symptoms were associated with non-experimental depressant use. Consequently, a clear pattern of using specific substances exclusively for specific symptoms was not found. Of interest, behavioural avoidance was found to be associated with non-experimental use of more types of substances than any other
symptom cluster. Avant et al. suggest that this finding and the lack of clear patterns might indicate that substance use is associated with general avoidance of symptoms rather than focused relief of specific symptoms. It is also important to note that some other studies have posited that withdrawal and intoxication symptoms of substances can mirror the appearance of PTSD symptoms. As a result, future research would benefit from including interview assessments that attempt to ensure that symptoms are directly related to PTSD rather than a result of substance use.

The self-medication hypothesis is a widely supported theory that explains the comorbidity between anxiety and other mood disorders and SUD (Leeies et al., 2010). However, in order to understand the relationship between PTSD symptoms and substance use, researchers have proposed several alternate models. One of these proposed models posits that substance use precedes the traumatic event in that the risky behaviours that are associated with substance use place individuals at higher risk of being traumatised and consequently suffering PTSD. For example an individual may develop post traumatic symptomatology as a result of being assaulted whilst attempting to acquire drugs. This model has been referred to as the susceptibility hypothesis as substance use may increase people’s susceptibility to trauma and subsequent trauma responses (Avant et al., 2011). While there is support in the literature regarding PTSD preceding SUD, no definitive causal relationship has been established. Studies have given merit to the self-medication hypothesis with findings that people with PTSD are more likely to use substances to manage negative emotions; reminders of the traumatic experience result in alcohol and other drug cravings; and fluctuations in PTSD
symptoms are temporally associated with alcohol and other drug use (Leeies et al., 2010).

Many researchers have suggested that PTSD symptoms instigate or exacerbate substance related disorders (Avant et al., 2011; Leeies et al., 2010; Saladin et al., 1995). There are a number of reasons that have been posited to account for this claim. The symptoms of PTSD are risk factors for relapse of alcohol and other drugs. This is more likely to occur when intrusive thoughts of the traumatic event and hyper arousal result in negative emotional states. The physiological reactions to fear and panic that arise when reminded about the traumatic event can also bring about negative physical states, which individuals believe can be managed via the use of substances. Ford and Russo (2006) noted that hypervigilance might manifest in order to remain alert to potential harm, which could result in individuals choosing to use stimulants in order to maintain their attentive state. An individual in that cycle may then choose to use depressants as a way to manage the physiological agitation resultant from the hyper arousal and stimulant use. Ford and Russo also suggested that individuals may engage in substance use to increase their sense of connection with others, particularly when numbness and dissociation are present (Weis, 2010).

Research is suggesting that childhood trauma can cause persistent dysregulation of the body’s stress response systems, which leads to negative affect symptoms (Van der Kolk, 2005). One specific brain region for emotional experience is the limbic region. Given that there is extensive connections between the prefrontal cortex and the limbic areas (amygdala, lateral hypothalamus, nucleus accumbens) the prefrontal cortex is thought to be implicated in abnormal emotional functioning and affect dysregulation (Khantzian & Albanese, 2008).
Emotional regulation is a vital process that we undergo on a daily basis. We manage negative emotions in response to external stress, reducing our experience of discomfort. In children this regulatory function is an important predictor of health conditions, including behavioural self-control, depressive symptoms, adjustment problems, social skills and physical health (Khantzian & Albanese, 2008). Young people encounter major developmental changes during early adolescence, characterised by the onset of puberty, advancing independence and social challenges. They need to adapt to and manage new, powerful emotions. Given that substance use problems often begin in early adolescence, a developmental perspective would provide a useful guide to understanding the link between affect regulation and substance use. Negative affect including anger, fear and frustration, emotional dysregulation and poor coping techniques have been identified as liability factors for substance abuse in adolescents (Khantzian & Albanese, 2008).

Among the common psychological legacies of childhood trauma is PTSD and CPTSD, the symptoms of which often lead abuse victims to seek relief through self-medication. This consumption of mind altering drugs and alcohol deadens feelings, alleviates fears and anxieties and provides temporary states of artificial euphoria (Lisak & Miller, 2003). According to Khantzian and Albanese (2008), trauma causes the brains and the minds of its victims to react differently to addictive substances. The biology and psychology of such experiences triggers a unique and exaggerated sensation of relief or even pleasure for PTSD/CPTSD victims, whereas otherwise the response to addictive drugs might be one of indifference or even aversion (Khantzian & Albanese, 2008). This is problematic as research has found a positive correlation between the severity of the trauma
and the probability of developing SUD; supporting the idea that those individuals with PTSD or CPTSD believe that they are experiencing significant symptom reduction when they abuse alcohol and other drugs. The more prolonged and severe the abuse, the more likely a person will develop substance using/dependence behaviours in order to manage or alleviate post traumatic symptomatology (Grupp, 2008). According to Stewart and Conrod (2003), PTSD has been shown to develop before SUD in the large majority of comorbid cases in retrospective studies and PTSD has been shown to contribute to increased risks of SUDs in prospective studies. Of interest and requiring further research, hyper arousal symptoms may be the specific feature of PTSD that renders certain clients particularly likely to resort to substance abuse and to prove additionally resistant to traditional SUD treatment (Stewart & Conrod, 2003).

Rachman (1991) recommended that, in addition to the simple determination of the co-occurrence of PTSD and SUD, attention should be given to comorbid clients’ perceptions of the psychological connectedness of their two disorders. Brown et al. (1998) were the first to investigate this issue as it pertains to SUD-PTSD comorbidity. They examined perceptions of functional associations between PTSD and SUDs among 42 comorbid clients receiving treatment for SUD. Consistent with the self-medication hypothesis, the large majority of comorbid clients reported feeling that their SUD symptoms worsened when their PTSD symptoms worsen (77%) and that their SUD symptoms improve when their PTSD symptoms improved (79%). Consistent with the substance induced intensification of PTSD symptoms hypothesis, more than half the comorbid clients reported that their PTSD symptoms worsened when their SUD symptoms worsen (51%) and that their PTSD symptoms improved when their SUD
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symptoms improve (52%). This pattern of findings in clients’ perceptions
highlights the importance clients place on PTSD symptoms contributing to their SUDs.

Epstein, Saunders, Kilpatrick, and Resnick (1998) examined the potential
mediating role of PTSD symptoms in explaining the relationship between
childhood sexual abuse and alcohol problems in adulthood. Participants were a
random non clinical sample of close to 3000 adult women who were interviewed
about their childhood sexual abuse history, lifetime PTSD symptoms and alcohol
abuse symptoms. Epstein et al. found that childhood sexual abuse history was
associated with twice the number of alcohol abuse symptoms in adulthood.
Further, alcohol abuse was found to be greater in sexual abuse victims who
developed PTSD than among those who did not. Path analysis demonstrated
significant pathways connecting childhood sexual abuse to PTSD symptoms and
PTSD symptoms to alcohol abuse. The researchers concluded that the association
between childhood sexual abuse and adult alcohol abuse was completely
mediated by PTSD symptoms.

Recurrent feelings of violence and rage are one of the most prominent
hallmarks for those who have suffered traumatic life experiences (Khantzian &
Albanese, 2008). Some of the symptoms of PTSD, in particular hypervigilance
and hyperactivity to particular stimuli, may render the victim more susceptible to
violent behaviour, a susceptibility that may be greatly enhanced by substance
abuse (Lisak & Miller, 2003). Although a minority of men and women with
complex trauma enter the criminal justice system, being repeatedly subjected to
maltreatment and neglect early in development increases an individual’s risk of
incarceration at some point in their lives (Quina & Brown, 2007). In his analysis
and research of male and female offenders, Harlow (1999) found that both men and women who reported histories of abuse were more likely to use illegal drugs and alcohol regularly, similar to other survivors of complex trauma where substance use is a condition commonly co-morbid with PTSD and complex trauma.

3.5 Substance Using Offenders

The correlation between alcohol and other drug abuse and crime is well documented (Khoury et al., 2010). Not only do crime and alcohol and other drug use have a significant impact on individuals, families and communities, but they can also create significant social and economic costs. Further, it is one of the most significant ongoing issues for the criminal justice system. Co-morbidity within the criminal justice system in Victoria has been the subject of research since the early 1980s. During this time, prevalence studies have identified an increasing number of men and women entering the criminal justice system with a dual diagnosis of problematic mental health and substance use. Victorian data shows that 13 percent of offenders referred and assessed by the Victorian Community Offenders Advice and Treatment Service (COATS) in 2005–06 had a dual diagnosis (Department of Justice, 2008). Further, the number of drug related offences is an indication of only one facet of drug problems among offenders. As of June 2007, 48 percent of offenders being supervised by Community Correction Services were referred for alcohol and other drug treatment. This figure clearly underestimates the number of offenders subject to a community based disposition who have alcohol and other drug issues, as it does not include offenders who are subject to Orders without supervision requirements (Department of Justice, 2008). A more recent study by Allnut et al. (2011) found that 42.7 percent and
55.3 percent of Australian prisoners had a mental health disorder and substance use disorder respectively. A total of 29 percent of these prisoners had been diagnosed as having both a substance use and mental health disorder in the 12 month prior to data collection.

The Australian Institute of Criminology (2013) identified a number of theories to explain how alcohol and other drug use and offending interact. One theory argues that alcohol and other drug use leads to crime—for example, through the maintenance of a drug habit (Makkai, 2001). Another theory is that crime can result in alcohol and other drug use—for example, through associations with deviant peers and/or risky behaviours. One position is that the use of alcohol and other drug use and engagement in criminal behaviour has the same cause—for example, inter and intrapersonal risk factors such as antisocial personality disorder and genetics have both been linked to the development of alcohol and other drug problems and criminal offending (Young, 2004). An alternate theory suggests that the use of alcohol and other drugs has been correlated with specific types of criminal offending (Makkai, 2001). For example, alcohol and other drugs have been correlated with property crime and some types of violent offences. In particular, the correlation between alcohol and assault has commanded a significant amount of media and policy focus in the last few years. Despite these theories, the research is still divided on the utility of these differing positions and it is noted that there is a specific lack of Australian-based theoretical research examining the link between crime and alcohol and other drug use. It is therefore important to understand not just the impact of alcohol and other drug use on the offence itself but also the extent and patterns of use by offenders (Australian Institute of Criminology, 2013).
3.6 Criminal Behaviour and Trauma

As mentioned previously, adults and children who have been victims of physical and/or sexual abuse often become traumatised and this traumatisation can lead to the development of PTSD. Post-Traumatic Stress Disorder has been found to increase the propensity to become violent and a strong correlation between aggressive behaviour and PTSD has also been established (Hosking & Walsh, 2005). This correlation has been well documented in studies examining aggression in war veterans, children who have experienced trauma and prisoners with histories of developmental trauma (Van der Kolk, 2005). It has been suggested that there is a link between developmental trauma and the development of delinquency. The type of trauma experienced by male and female delinquents appears to be similar other than a higher rate of sexual abuse that is experienced by females. This may account for the high prevalence of PTSD reported by females compared to males. However male offenders with PTSD tend to experience higher rates of comorbidity compared to those without PTSD. Another possible explanation for the development of PTSD may be the moderating effects of family support that were discussed in chapter one (Dixon et al., 2005).

A direct relationship between the severity of developmental trauma and the later tendency to victimise others has also been determined. This type of abuse appears to increase the risk for later delinquency and violent criminal behaviour (Hosking & Walsh, 2005). To support this finding, Collins and Bailer (1990) found a relationship between PTSD and incarceration for violence; Long (1991) found high rates of PTSD in incarcerated juvenile offenders; Raeside (1994) found PTSD to be ever present within Australian female prisoners and suggested that this contributed significantly to their criminal behaviour. Butler and Allnutt
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(2003) conducted a study funded by the New South Wales Department of Corrections and found that 24 percent of the prisoners suffered from PTSD (Hosking & Walsh, 2005).

There have been numerous studies that have linked traumatic experiences with criminal behaviour (Ardino, 2011; Foy, Furrow & McManus, 2011). Further, these studies reveal that offenders present with higher prevalence of PTSD compared to the general population (Ardino, 2012). Child abuse, neglect, sexual abuse, poverty and the witnessing of violence are among the most common risk factors for the development of PTSD, aggression and antisocial behaviour (Ardino, 2012). Chronic and prolonged exposure to violence may result in the routine perpetration of violence as evidenced by studies that have found a relationship between trauma and subsequent aggressive and criminal acts (Skowyra & Cocozza, 2006; Smith, Ireland & Thornberry, 2005; Windom & Maxfield, 2001). According to Van der Kolk (2005) people with childhood histories of trauma, abuse and neglect make up almost the entire criminal population in the United States.

Both male and female offenders have been found to have histories of interpersonal violence. It is estimated that at least half of incarcerated females have experienced at least one traumatic event in their lifetime whereas males have lower yet still significant rates of trauma exposure (Wolff, Shi & Siegel, 2009). Twenty five to 50 percent of female prisoners report a history of developmental trauma compared with six to 24 percent of male prisoners reporting experiencing developmental trauma. Physical Abuse during childhood and adolescence is more likely than sexual abuse for men, but these are equally experienced for women. Wolff et al. (2009) investigated the rate and type of victimisation in
7,500 prisoners across 13 prisons (12 male: n = 6964, 1 female: n = 564). Via a survey they found that more than half of all male and female prisoners reported having been physically abused in childhood (56% of males and 54% of females). Forty seven percent of female prisoners reported being sexually abused during childhood, compared with 10 percent of male prisoners. An interesting additional finding indicated that those prisoners who reported having been victimised whilst in custody (staff and prisoner assaults- physical and sexual) were significantly more likely to report having experienced developmental trauma (Wolff et al., 2009). This finding is consistent with previous research that suggests that once victimised an individual’s vulnerability to be further victimised is higher.

In a national study of inmates, Harlow (1999) found that nearly 50 percent of women and 10 percent of men had experienced some form of abuse prior to being incarcerated. Of these, 23-37 percent of women and 6-14 percent of men reported being a victim of sexual abuse prior to the age of 18. Furthermore, Weeks and Widom (1998) studied the prevalence of childhood victimisation in a sample of convicted offenders using multiple and sophisticated measures of physical and sexual abuse as well as neglect. More than two thirds of the 301 male offenders they assessed reported histories of childhood victimisation, with physical abuse being the most common form. In addition, Dutton and Hart (1992) reported that 41 percent of their sample of 604 convicted offenders had experienced serious childhood abuse. Furthermore they found that the rate of violent acts committed by abused offenders was more than twice that of non-abused offenders. Goff, Rose, Rose and Purves (2007) conducted a systematic review of the literature to determine PTSD prevalence rates amongst incarcerated...
offenders and found that the prevalence of PTSD in prisoners ranged between four percent and 21.4 percent.

The above presented research is particularly pertinent to this thesis as it outlines the over representation of substance use in people with developmental trauma histories and the over representation of offenders with developmental trauma histories. However, there are a number of limitations to the research investigating the relationship between trauma and criminal behaviour. First, much of the research has focused on incarcerated young offenders, making these results difficult to generalise to adults. Secondly, many of these studies are descriptive and fail to examine the psychological mechanisms underpinning trauma offending trajectories. Further, available studies rarely explore the specific trajectories that connect trauma, PTSD and criminal behaviour (Ardino, 2012). However there have been a number of theories suggested, accounting for this over representation.

Individuals who are incarcerated are at higher risk of being re-traumatised. Their legacy of victimisation increases their risk of alcohol and other drug abuse, PTSD, depression, low self-esteem and antisocial behaviour. The experience of being incarcerated is likely to activate and exacerbate past trauma symptomatology. The prison environment may trigger re-experiencing memories of prior victimisation and make an individual vulnerable to re-victimisation (Wolff et al., 2009). Some studies have investigated comorbid PTSD and SUDs in prisoners and found that men are more likely to have higher recidivism rates compared to those men with only SUDs. Further, female prisoners with both disorders are more likely to reAPAe compared to those women with only SUD. Consequently, prisoners with comorbid PTSD and SUD are at higher risk for
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remaining entrenched in the criminal justice system (Ardino, 2012). The correlation between PTSD and violent behaviour has major implications for the treatment of offenders. According to Hosking and Walsh (2005), if PTSD remains untreated, the likelihood of a recurrence of violent behaviour is much higher.

Post-Traumatic Stress Disorder negatively effects impulsivity, aggression, negative emotions and general affect dysregulation. Consequently, it is critical that individuals with PTSD are recognised as having self-regulation problems that have been found to increase their risk of reoffending. Post-Traumatic Stress Disorder may result in individuals engaging in greater risk taking behaviours or in seeking out dangerous and sensational situations as a function of compulsive re-exposure to trauma and as an attempt to resolve the trauma through re-enactments of their earlier experiences of violence. While this characteristic is not specifically mentioned in diagnostic systems, Van der Kolk describes this phenomenon as a “compulsion to the trauma” (Hosking & Walsh, 2005). These re-enactments can involve “acting in” behaviours such as self-harm, suicide or depression or “acting out” behaviours such as harm to others and criminal behaviour. This finding suggests that the antisocial acting out of unresolved trauma may be a consistent feature in the behaviour of offenders. The mechanism of acting out and the compulsive re-exposure to trauma in PTSD may be critical to our understanding of how post traumatic symptomatology maintains a high risk of reoffending (Ardino, 2012). Davidson (2002) hypothesised that affect dysregulation has the potential to precipitate aggression when serotonergic pathways in ventral and orbital areas of the prefrontal cortex fail to inhibit the amygdala and anterior cingulate. Impulsive aggression occurs when there is a
failure to: (1) modulate stress responses involving the hypothalamus, brainstem and autonomic nervous system, (2) modulate negative emotions by incorporating information about the social context, (3) accurately monitor the source of perceptions and impulses and (4) shift from emotion-driven impulsivity to planned goal directed decisions and actions (Dell & O’Neil, 2009).

Whilst dissociation during the commission of a violent crime has not yet been directly linked to the development of post traumatic symptoms, it seems plausible that some violent offenders who report amnesia may in fact have a dissociative disorder (Dell & O’Neil, 2009). Evans, Ehlers, Mezey, and Clark (2007) in press report that approximately a fifth of juvenile violent offenders and approximately a quarter of homicide offenders, claim at least partial amnesia during the commission of the crime. While this figure is lower than the findings of Moskowitz (2004), where, 30 percent of homicide offenders reported experiencing amnesia; both studies highlight a significant minority. According to Dell and O’Neil (2009) individuals with either pre-existing or emerging dissociative disorders can also develop PTSD in response to their violent crimes. Treatment of these offenders needs to ameliorate the dissociation in order to decrease the risk of violent reoffending (Dell & O’Neil, 2009).

### 3.7 Chapter Summary

It is evident that comorbidity of substance use, trauma presentations and antisocial behaviour is quite high. Childhood victimisation increases the risk for later violent offending as well as for an earlier onset of delinquent behaviour (Rivera & Widom, 1990). In particular, the rate of violent acts committed by abused offenders is double that of non-abused offenders. As previously stated substance related disorders are also commonly comorbid with and complicate the
course and treatment of many mental disorders such as Conduct Disorder in adolescents, Anti-Social, and Borderline Personality Disorders (APA, 2000). This is particularly relevant given the higher rates of service utilisation for comorbid individuals. This chapter also outlined the disproportionate number of offenders with PTSD as well as their tendency to utilise alcohol and other drugs to manage their symptomatology. However, controversy remains over the mechanisms and relationship between trauma, substance use and offending. While there is some suggestion that the use of alcohol and other drugs functions as an avoidance strategy to alleviate PTSD symptoms, the research indicates that it is premature to conclude positive correlations between particular substances and PTSD symptom clusters. In order to better understand the placement and pathways of these issues in criminological and psychological theories of crime, it is important to evaluate the major forensic theoretical models in Chapter 4.
Chapter 4: Forensic Theoretical Frameworks

4.1 Chapter Overview

According to Ward and Fortune (2013) a rehabilitation theory constitutes a framework theory that should possess the resources to guide practitioners in all aspects of their work with offenders. It is not a treatment model or an etiological theory; however it does contain some general assumptions concerning aetiology and outlines guidelines for intervention in light of these assumptions and overarching normative principles. Rehabilitation theories are integrative practice frameworks that combine ethical, theoretical and scientific and practice elements. Unfortunately, this often misunderstood by researchers and practitioners that focus only on the treatment utility of, for example, the Good Lives Model (GLM) or Risk, Needs and Responsivity Model (RNR), when they should be evaluating their merits as a rehabilitation theory or framework (Ward, Yates & Willis, 2012). Within the forensic arena there are three main theoretical models that underpin the assessment, conceptualisation and recommended treatment of offenders. These include the Psychology of Criminal Conduct (PCC); the RNR, and the GLM. This chapter will present each of these and explore the placement of developmental trauma and substance use within each framework.

4.2 The Psychology of Criminal Conduct

The Psychology of Criminal Conduct (PCC) was developed by Andrews and Bonta in the 1980s and has been refined further by these authors since then. The PCC denotes that there are many pathways and variables that contribute to offending behaviour. It is model concerned with individual differences in criminal behaviour, which makes it a particularly useful guide for assessing the risk of recidivism and planning rehabilitation attempts (Ogloff & Davis, 2004).
The model takes a holistic approach and seeks to explain the variability of criminal behaviour by emphasising its complexity within social, biological and psychological contexts. The PCC is predominantly a personality and social psychological perspective of offending behaviour that is grounded in Bandura’s principles of social learning theory (1975), which draws from Sutherland’s (1939) differential association theory and Skinner’s (1938) notion of operant conditioning (Ogloff & Davis, 2004).

In any particular situation, whether or not the individual commits a criminal act or not depends upon prior learning and the particulars of the context. However, there are many pathways to criminality and the PCC suggests that the following factors are particularly influential: possessing antisocial attitudes, having antisocial associates, a history of offending, and antisocial personality traits. Less influential factors include familial difficulties and indicators of social achievement including school and work. The PCC recognises that personal, interpersonal and social factors are involved in the acquisition and maintenance of criminal behaviour (Ogloff & Davis, 2004). Figure 1 below depicts the general personality and psychological perspective on criminal conduct that underpins the PCC.
Based on the figure above, there are many pathways and variables that the PCC suggests contribute to offending behaviour. Developmental trauma has the capacity to influence a number of the factors included in the figure. Of particular interest is its impact on family of origin (values and conduct history), family-child relations (affective quality and appropriate supervision) and temperament/verbal aptitude/socialisation and self-management ability. If a child is being modelled antisocial behaviour via his or her caregivers perpetrating against them,
it is possible that the child will act out in similar ways. Further, if the child’s
caregiver is not providing adequate supervision as is often seen in chaotic abusive
family homes, then the child is left to his or her own devices which may result in
no boundaries and an absence of learning what is appropriate behaviour. Self-
management ability could otherwise be considered self-regulation ability, which
has consistently been demonstrated to be hindered when a child experiences
multiple or enduring developmental trauma. While the PCC does not recognise
these factors as particularly influential, the accumulation of these factors for any
one individual may in fact prove to be. The PCC provides directions for the
assessment of offenders and the direction of treatment that are embedded in the

4.3 Risk, Needs, Responsivity Model (RNR)

The Risk, Needs, Responsivity model was primarily developed by Andrews
and Bonta in 1990. The underlying purpose of the RNR model is to benefit both
offenders and society by distancing offenders from the criminal justice system
with the goal of getting them to engage in prosocial community life (Polaschek,
2012). The RNR model is a theoretical framework that outlines causality of
persistent criminal behaviour and principles for reducing this behaviour
(Polaschek, 2012). It specifies how an offender’s criminogenic characteristics
should drive the selection and implementation of correctional treatment services.
These criminogenic characteristics relate both to risk (i.e., those factors that
predispose an individual to commit criminal conduct) and need (i.e., those
disturbances in biopsychosocial functioning that impinge on an individual’s
ability to function in society) (Taxman & Marlowe, 2006). Underpinning the
RNR model is the view that the best way to reduce recidivism rates is to identify
and reduce an individual’s array of dynamic risk factors. Recidivism is defined as a return to delinquency and crime, and in terms of forensic matters; a recidivist is typically defined as one who has had a second (or further) conviction or incarceration (Reber & Reber, 2001). As recidivism is a major concern for community safety and of restorative justice, treatment is often targeted at reducing factors that increase this likelihood. These factors constitute clinical needs or problems that should be explicitly targeted in treatment. Thus, treatment programs for offenders are typically problem-focused and aim to eradicate or reduce the various psychological and behavioural difficulties associated with offending. These problems include intimacy deficits, deviant preferences, cognitive distortions, empathy deficits, alcohol and other drug abuse, and difficulties managing negative emotional states (Ward & Brown, 2004).

Andrews, Bonta and Hoge (1990) proposed the following three principles at the core of effective programing: risk, needs and responsivity. The risk principle has two components. The first denotes that at any point in time, people differ from each other in their likelihood of engaging in criminal behaviour and that this likelihood can be predicted based on a variety of factors such as current attributes and previous offending behaviour. Offenders’ current risk level needs to be identified prior to interventions being offered as more crime can be prevented by targeting higher rather than lower risk offenders for treatment. The second component stipulates that in order to reduce risk in high risk offenders, intensive intervention is required (Polaschek, 2012). Prediction of criminality requires the identification of risk factors that are empirically related to subsequent offending. These can be divided into static and dynamic risk factors. Static risk factors are generally historical markers that cannot be changed such as criminal history and
age of first offence, whereas dynamic risk factors are potentially changeable aspects of the individual such as accommodation, employment, education and antisocial attitudes (Ogloff & Davis, 2004). According to Ward and Brown (2004), risk factors fall within four broad domains: (1) dispositional factors such as psychopathic or antisocial personality characteristic, cognitive variables and demographic data, (2) historical factors such as adverse developmental history, prior history of crime and violence, prior hospitalisation and poor treatment compliance, (3) contextual antecedents to violence such as criminogenic needs, deviant social networks, and lack of positive social supports, and (4) clinical factors such as diagnosis, poor level of functioning and substance abuse.

The need principle describes what should be treated and is concerned with targeting criminogenic needs in treatment. It also makes a distinction between criminogenic and non-criminogenic needs. It acknowledges that offenders have many needs, however, it suggests that some of these needs are functionally related to criminal behaviour (criminogenic) and others have a minor (or no) causal relationship to criminal behaviour (non criminogenic) (Andrews & Bonta 2010). Criminogenic needs are the subset of dynamic risk factors that have been found to directly relate to a risk of reoffending. They are therefore modifiable, whereby a change in the risk factors equates with a change in the risk of reoffending. There have been eight central risk/need factors, otherwise known as the “big eight”, identified for the development and maintenance of criminal behaviour: 1) a history of antisocial behaviour characterised by early involvement in a number and variety of antisocial activities and settings, 2) an antisocial personality, characterised by impulsive, adventurous, pleasure-seeking and aggressive behaviours with a callous disregard for others 3) antisocial attitudes
that are favourable of crime, 4) antisocial peers and isolation from prosocial individuals, 5) problematic home circumstances, 6) problematic school or work circumstances, 7) limited positive leisure activities and 8) alcohol and other drug use (Looman & Abracen, 2013).

The RNR model considers personal, interpersonal and social factors as being involved in the development and maintenance of criminal behaviour. Further, Andrews and colleagues argue that treatment should focus on criminogenic needs as non-criminogenic needs such as self-esteem are tertiary and only relevant in respect to the responsivity principle (Looman & Abracen, 2013). According to Ogloff and Davis (2004), the term ‘needs’ requires some clarification, as it has been argued that risk factors for recidivism may not necessarily be the needs of the offenders themselves. Thus, it is perhaps useful to conceptualise the principle as treatment needs of the offender. While offenders may have many treatment needs, not all are criminogenic. The RNR approach does not state that offenders should only be provided with services targeted at criminogenic needs. However, it does suggest that focusing on non-criminogenic needs would not reduce the likelihood of reoffending and must only be addressed in the context of criminogenic needs (Ogloff & Davis, 2004).

The responsivity principle addresses the ‘how’ of intervention and is concerned with providing treatment in a style and mode that is responsive to the offender’s learning style and ability. There are two aspects to the responsivity principle. The first is general responsivity, which is concerned with influencing strategies of choice and cognitive social learning practices. It recognises the importance of the therapeutic relationship but also adds that structured, cognitive behavioural intervention is an important component of effective correctional
treatment. The second is specific responsivity, which individualises treatment according to strengths, ability, motivation, personality, and bio-demographic characteristics such as gender, ethnicity and age. Specific responsivity ideally matches the treatment to client characteristics (Andrews & Bonta 2010). The responsivity principle takes into account the cognitive, personality and social characteristics of the individual when planning interventions. These may include considerations of learning style, literacy, disability and emotional regulation etc. Some of these may be construed as non-criminogenic needs, however these non-criminogenic needs may affect responsivity as the individual may be unable to focus on criminogenic needs if the non-criminogenic needs are not factored into the interventions (Ogloff & Davis, 2004).

Effective implementation of the RNR model requires the development and use of valid risk and needs assessment tools. In addition, it requires the creation of an array of treatment programs that are capable of addressing the mix of risk and need characteristic that are commonly seen in offenders. Unfortunately researchers have observed that within correctional practice, assessment information is collected but rarely used (Taxman & Marlowe, 2006). Further, the assessment tools often lack sufficient evidence of validity and/or reliability and typically only assess a small amount of risk and needs factors. Moreover, regardless of the assessment results, in practice there is a one size fits all approach whereby all offenders are referred to the same limited programs and services that are available (Taxman & Marlowe, 2006). This is generally a result of inadequate funding and resources to meet the needs of offenders with differing responsivity factors and levels of risk. One of the biggest criticisms of the RNR is that it is deficit focused and fails to recognise the potential strengths of
offenders and utilise those strengths to foster change (Ward & Brown, 2004). A further discussion on the strengths and weaknesses of the RNR will be presented later in the chapter. A possible alternate understanding of offending behaviour that acknowledges offenders individual strengths is provided in the Good Lives Model.

4.4 Good Lives Model (GLM)

The Good Lives Model (GLM) of offender rehabilitation is a relatively new approach to working with offenders that can be contrasted with the more traditional Risk-Need-Responsivity approach (Whitehead, Ward & Collie, 2007). The GLM was developed by Ward and his colleagues as an alternative to the RNR model which they argue focuses on risk management at the expense of other more psychologically relevant factors such as engagement in meaningful activity, that come together to promote an individual’s well-being and fulfilment. The authors have emphasised that the factors that meet human needs include, but go beyond criminogenic needs (Ogloff & Davis, 2004). The GLM is a comprehensive model of offender rehabilitation that focuses on promoting individuals’ important personal goals, while reducing and managing their risk for future offending (Whitehead et al., 2007). The GLM of offender rehabilitation is essentially a strength based approach in that it seeks to give offenders the skills and capabilities to secure primary human goods in socially acceptable and personally meaningful ways (Ward & Brown, 2004).

From a GLM perspective, rehabilitation involves two key tasks; normative and capacity building. Normative tasks involve the practitioners assisting individuals to think about what constitutes a “good life” via self-reflection and the identification of core values. Capacity building involves the acquisition of
internal and external resources/capabilities that are needed to implement good lives plans in ways that respect personal priorities as well as reducing the risk of recidivism. This task should draw from empirical research and robust theoretical frameworks concerning the etiology of offending, what constitutes effective practice and how best to work with communities to facilitate re-entry and social integration (Ward & Fortune, 2013). The etiological underpinnings of the GLM can be understood in three parts. The first represents the offenders past life, specifically, childhood experiences which had enduring impact such as parental modelling and trauma. The second represents the offender’s lifestyle around the time of the offending behaviour. The third looks at the two pathways to offending, direct versus indirect. The relevance of developmental experiences on behaviour later in life has been acknowledged in criminological and psychological theory. There has been considerable exploration of the role of developmental experiences in criminality through approaches such as social learning theories, psychoanalytic theories and developmental and life course criminological theories. Additionally, research has consistently found that poor parental supervision, parental aggressiveness and parental conflict are precursors of violent offending. An explicit life plan can be directly or indirectly related to offending. For example an individual may have an explicit life plan which includes trafficking in the future which would constitute a direct pathway to offending. Whereas another individual may have invested time into planning their perfect future but when this plan does not come to fruition maladaptive coping and inappropriate means could result in an indirect pathway to offending. An implicit life plan may result in an indirect pathway to offending due to lack of planning and a sense of hopelessness (Purvis, Ward and Willis, 2011).
Recent key developments in the GLM include an alignment with distance theory and research and the integration of the Self-Regulation Model-Revised (Willis, Prescott & Yates, 2013). Desistence research indicates that the majority of men who become involved in the criminal justice system in their adolescence and early adulthood do not continue to commit crime. In fact, only a minority of offenders continue to reoffend at a high rate across their lifespan. Ward and Laws (2010) identified 12 influences that contribute to desistance based on their review of available literature: 1) aging, 2) marriage, 3) employment stability, 4) military service, 5) juvenile detention, 6) prison, 7) education, 8) cognitive transformation (i.e., changes in how the person views him/herself), 9) the Pygmalion effect (i.e., the high expectations of others lead to greater self-belief), 10) cutting off bonds with a criminal past, 11) spirituality and 12) fear of serious assault or death. Ward and Laws (2010) listed a 13th factor, sickness and incapacitation, arguing that criminal lifestyles are associated with unhealthy and dangerous behaviour and as a result, some offenders desist because they are unable to continue their past lifestyle (Looman & Abracen, 2013).

Within the model, criminogenic needs are conceptualised as internal and external barriers to achieving a “good” life. Drawing from psychological, social, biological, and anthropological research, the GLM’s underlying premise is that all people, including offenders, are goal directed and therefore predisposed to seeking out a number of primary human goods. These are defined as states of mind, personal characteristics, or experiences that are intrinsically beneficial and sought after. According to Ward, Yates and Willis (2012), goods represent a person’s core values and life priorities. Ward and colleagues have proposed 11 classes of primary goods: 1) life (including healthy functioning and living), 2)
knowledge, 3) excellence in play, 4) excellence in work (including mastery experiences), 5) excellence in agency (i.e., autonomy and self-directedness), 6) inner peace (i.e., freedom from emotional turmoil and stress), 7) friendship (including intimate, romantic, and family relationships), 8) community, 9) spirituality (in the broad sense of finding meaning and purpose in life), 10) happiness, and 11) creativity (Ward, Yates & Willis, 2012).

Under the GLM, primary goods are defined as actions, states of affairs, characteristics, experiences, and states of mind that are intrinsically beneficial to human beings and therefore sought for their own sake rather than as a means to more fundamental ends (Ward & Brown, 2004). Whilst it is assumed that people seek out all of the primary goods to some degree, the priorities given to certain primary goods reflect an individual’s particular values and life priorities. In essence, primary goods allow individuals’ a sense of who they are and what they value (Ward, Yates & Willis, 2012). Secondary goods are the means used to secure the primary goods, and consequently it is here that people often experience problems. Secondary goods are considered approach goals that involve specific roles, practices, and actions that provide routes to the primary goods. For example, the primary good of excellence in play may be achieved via involvement in sport (Ward, Yates & Willis, 2012).

The possibility of constructing and translating conceptions of good lives into actions and concrete ways of living depends on the possession of internal (skills and capabilities) and external conditions (opportunities and supports). The specific form that a conception will take depends on the actual abilities, interests and opportunities of each individual and the weightings he or she gives to specific primary goods. Psychological, social, and lifestyle problems emerge when the
internal and/or external conditions are faulty in some way (Ward & Brown, 2004). The GLM argues that there are four types of difficulties that people can have in the way they are currently living or the life plan that they mentally constructed: capacity, scope, means and coherence. A ‘way of living’ refers to how a person is currently living their life in respect to daily activities, functioning, and behaviours and reflects an individual’s values and attitudes. A ‘life plan’ refers to how a person plans to live their life now and in the future. Often, the way an individual lives their life can be different to the way in which they planned to live their life (Purvis, Ward and Willis, 2011).

The first difficulty, capacity, can be broken down into type types, internal and external capacity. Internal capacity refers conditions internal to the person, such as their skill level or ability to secure goods. Problems with internal capacity are referred to as internal obstacles. Therefore, the focus on treatment would be to enhance or acquire particular skills to secure desired goods. For example, an individual may wish to emphasise the good of excellence in work, however may lack the skills to gain the type of work that he/she believes will provide the sense of achievement and fulfilment sought. Barriers to functioning at one’s full capacity can occur on several levels, cognitive (the individual lacks the knowledge or mental ability), psychological (the individual lacks belief in self and/or motivation), and behavioural (cognitive and/or psychological issues result in behavioural problems that limit the individual). External capacity refers to those conditions or contexts external to the individual (e.g., availability of social supports, employment opportunities, access to education) that are needed to achieve goals and secure goods. Problems with external capacity are referred to as external obstacles. For example an individual may want to become an artist
(primary human goods sought could be excellence in work, excellence in play and/or creativity) but because he/she lives in an isolated location (external obstacle) there are no courses available. Therefore, internal and external obstacles can govern the means used to secure a primary human good. In the example above, the external obstacle of geographical isolation may direct the individual to buy an art book and teach him/herself. Alternatively, the individual may decide to give up resulting in the goal and associated goods being unfulfilled which may lead to problems in scope (Purvis, Ward and Willis, 2011).

When an individual fails to strive for or secure (at some level) each of the eleven basic human goods, their life or plan is considered to lack scope. A lack of scope may lead to the neglect of one of the three clusters of goods: body, self or social. A neglect of one cluster could result in physiological dysfunction and/or psychological distress leading to mental health problems or social maladjustment. Some problems in scope are caused by disinterest in certain goods; however a lack of scope is usually a result of problems in capacity. For example, a lack of interpersonal skills and a distrust for others is likely to causes problems in securing the good of relatedness and community and may also create difficulties at work (excellence at work) and reduced engagement in leisure activities (excellence in play). Human primary goods can be sought in any number of ways and sometimes the means in which they are sought are inappropriate. Due to the inappropriateness of the means by which the offender is seeking to a good, it is unlikely that it will be properly secured and the offenders’ needs fulfilled (Purvis, Ward and Willis, 2011).

It is critical that goods are ordered and coherently related to each other otherwise frustration, harm and an overall lack of purpose and meaning can arise.
There are two types of coherence problems: horizontal and vertical. Horizontal coherence refers to the extent to which goods are related to each other in mutually and consistent ways. Goods need to complement one another rather than being in conflict. For example, an individual may equally strive for the goods of relatedness via a romantic relationship and excellence in agency; however these goods may cause conflict in the ways these goods are sought. In this example, the individual desires to feel close and secure with their partner, but becomes aggressive in order to feel autonomous and in control. Vertical coherence requires the ranking of goods. Individuals need to have an understanding of which goods are important to them and therefore prioritise as this should govern what activities they engage in on a daily basis. For example a person who values the good of relatedness over excellence in work is going to be relatively unhappy if he/she lives their life as a single person who works long hours. A lack of vertical coherence has the potential to result in meaninglessness and unhappiness which may lead an individual to focus on immediate gratification over the fulfilment of long-term goals. It is the aim of rehabilitation to identify any of these four problems so that lifestyles and life plans can be tailored to each offender’s preferences, capabilities, skills, temperament and opportunities. This would allow the individual to access goods in prosocial ways that are intrinsically beneficial and meaningful (Purvis, Ward and Willis, 2011).

The presence of inadequate scope (e.g., ignoring the goods of leisure, health, or emotional regulation), conflict (e.g., between relatedness and agency), inappropriate means (e.g., seeking to establish a sense of personal agency through violence or intimidation), or lack of capabilities (e.g., insufficient internal and
external resources to achieve a goal) is hypothesized to result in dysfunctional and possible antisocial behaviour (Ward, Yates & Willis, 2012).

Within the GLM, criminogenic needs (otherwise known as dynamic risk factors) are internal or external obstacles that frustrate and block the acquisition of primary human goods. The responses to these obstacles are learned and conditioned throughout the individual’s life, which often means individuals lack the ability to obtain important outcomes in their lives and are frequently unable to think about their life reflectively (Whitehead et al., 2007). According to Ward and Brown (2004), the detection of dynamic risk factors or criminogenic needs signals that there are problems in the way offenders seek human goods. Criminogenic needs are associated with the distortion of these conditions and can be viewed as internal or external obstacles that prevent basic needs from being met in an optimal manner. Therefore, an individual is hypothesised to commit criminal offences because he or she lacks the capabilities to realise valued outcomes in his or her environment in personally fulfilling and socially acceptable ways (Ward & Brown, 2004). “A good life becomes possible when an individual possesses the necessary conditions for achieving primary goods, has access to primary goods, lives a life characterised by these goods, and when this is achieved in balance with the social obligations of community membership” (Ward & Brown, 2004, p. 247).

The GLM addresses criminogenic needs directly and indirectly through the application of cognitive behavioural and social interventions designed to assist the offender in acquiring the competencies to achieve their primary goods. These interventions may involve a range of strategies designed to improve the offender’s skills and knowledge such as problem solving, stress management and
learning how to challenge cognitive distortions. The ultimate focus of the GLM is on increasing an offender’s agency, psychological well-being and opportunities in order to live a prosocial life (Ward & Fortune, 2013).

Ward (2010) provided a summary of the five phases of GLM assessment and intervention. Phase one involves identifying the social, psychological and material aspects of the individual’s offending, including their level of risk (criminogenic needs) and their social, physical, and psychological resources at the time of their offending and in the past. The second phase identifies the function of the offending behaviour through the exploration of the primary goods that are directly and indirectly associated with the behaviour. The third phase involves identifying core practical identities and their associated primary values to assist with the development of the life plan. When an offender’s conceptualisation of what constitutes a good life is understood, future-oriented secondary goods can be collaboratively identified to fulfil these goods in socially acceptable ways. The fourth phase involves translating the primary values/goods into a way of functioning and living their good life in order to develop a good lives plan. An effective good life plan involves outlining graduated, step wised phases and transitions that are required for the offender to acquire the capabilities to fulfil the human primary good. This would also include information about specific training options, support groups and skill based groups needed to create a new identity. The fifth phase involves developing a detailed concrete good lives plan that incorporates the internal and external conditions required to facilitate the acquisition of identified primary goods.

The GLM addresses risk by incorporating the RNR principles of risk, need, responsivity and professional discretion. Further, it provides a comprehensive
framework to guide practitioners in their work with offenders. It does so in a way that accepts the ethical and legal requirement to protect the interest of the community while appreciating the obligation to assist offenders to live better lives once they have completed their punishment (Ward, Yates & Willis, 2012). From the GLM perspective there should be a direct relationship between goods promotion and risk management whereby rehabilitation involves a holistic reconstruction of self. Ward and Laws (2011) argue that the focus on the promotion of goods will likely modify and/or eliminate risk factors (Looman & Abracen, 2013).

4.5.1 Identifying the Strengths and Weaknesses of the RNR

Research indicates that treatments designed around the RNR principles are more effective compared to those that are not. Further, treatment effect is linearly related to the number of principles to which the treatment adheres (Looman & Abracen, 2013). Meta-analyses demonstrate a number of outcomes: 1) adherence to RNR principles in the development of treatment programs leads to greater reductions in recidivism, 2) programs that address non-criminogenic needs tend to be either less effective or ineffective in reducing recidivism, or may even be associated with increased rates of recidivism, 3) relAPAe prevention approaches delivered within the RNR framework are effective in reducing recidivism and 4) these results apply to across types of offenders (Looman & Abracen, 2013).

The RNR model has strong unifying power and external consistency. It has significant explanatory depth such as its ability to explain the importance of a positive therapeutic relationship as a necessary condition but not sufficient for effective outcomes. It is difficult to fault the RNR model on its consistency with pre-existing empirical data. Its empirical validity is further supported by research
continually finding that treatment effectiveness in reducing recidivism is related to the extent to which the design and implementation conforms to the RNR model. Further, the fertility and practical utility has been significant as others have used it to understand the effects of diverse types of programs such as prisoner re-entry, supervision and family interventions. It has also inspired new assessment tools and approaches, and new tools for assessing program quality and consequent accreditation. In summary, according to Polaschek (2012), the RNR model has made a substantive original contribution to criminal justice assessment, intervention, research, and program integrity and program accreditation.

Despite the significant contributions that the RNR model offers, it also has some weaknesses and limitations. The PCC is the only detailed source of information about the RNR model which is often simplified in article summaries to only include brief underlying theory with a focus on the three core principles. According to Polaschek (2012), “the volume and complexity of the PCC makes familiarizing oneself with the full model and its underpinnings a committing task (pg. 8).” Therefore whilst the principles are succinct, the overall framework lacks simplicity and parsimony. Further when it comes to the responsivity principle its explanatory depth is limited. It has been presented as a catch all category with limited detail about offender motivation and engagement. Another important limitation on explanatory depth is the conceptual gap between dynamic risk factors and the theoretical resources needed to translate these factors into intervention design, individual clinical formulations, treatment plans and change monitoring. While the central eight risk factors are empirically well established as correlates both of criminal propensity and of programs that reduce recidivism they are not meant to be a substitute for adequate understanding of a) the central
mechanisms driving criminal propensity, and therefore b) how different risk factors are related to one another and c) how change processes work of these mechanisms with different offenders (Polaschek, 2012).

The RNR is criticized for its narrow focus on risk management at the detriment of exploring the role of human goods and the value of building strengths, capabilities and well-being (Purvis, Ward and Willis, 2011). Further criticisms of the RNR approach include that it is based on avoidance goals, is poorly integrated with desistance factors, does not engage the offender at the level of agency and their core values, is insufficiently motivating and underplays the importance of the therapeutic relationship in the change process (Ward & Fortune, 2013). According to Ward, Yates and Willis (2012) focusing life on managing risk and avoiding problematic situations would be unmotivating for any person. Further, encouraging offenders to internalize societal laws and norms simply because we want them to is likely to fail. Andrews et al. suggest that the problems within the RNR can be overcome by invoking a fourth principle, professional discretion in assessment and treatment. In practice, this typically translates into non-criminogenic treatment targets that do not have empirical support, such as enhancing victim empathy. By contrast, the GLM provides structured guidance for the use of professional judgement in including all relevant life, criminogenic, and responsivity factors in intervention (Ward, Yates & Willis, 2012).
4.5.2 Identifying the Strengths and Weaknesses of the GLM

Interventions within the GLM not only aim to manage risk specifically, they also strengthen offenders’ capacity to achieve valued goods in socially acceptable and legal ways. Criminogenic needs are therefore conceptualised within GLM treatment plans as obstacles blocking goods fulfilment and are targeted within the broader focus of goods fulfilment. This is in contrast to the RNR that focuses on circumstances, problems, or ways of thinking that offenders must avoid or overcome (Ward, Yates & Willis, 2012). Due to the GLM’s analysis of the relationship among criminogenic needs, primary goods, and their representation in offenders’ implicit and explicit “good life” plans, it is easier to formulate holistic and comprehensive plans that incorporate vocational, educational and therapeutic elements. Further, GLM intervention that focuses on goal attainment allows offenders the opportunity to actively approach and practice behaviour associated with the prosocial attainment of goods, therefore shifting cost-reward contingencies. Conversely the RNR focuses on shifting these contingencies only in relation to criminal behaviour (Ward, Yates & Willis, 2012).

The GLM works with offenders’ narrative identities and core commitments and places values at the heart of the rehabilitation process. This focus makes it easier for treatment providers to engage offenders in the process of change without the need for additional interventions such as motivational interviewing. Dissimilar to the RNR, the GLMs inclusion of offender’s core interests, values, and commitments makes it easier to establish strong alliances and working relationships with offenders (Ward, Yates & Willis, 2012). Research indicates that the addition of the GLM to RNR practice increases motivation as
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demonstrated by reduced treatment dropout rates and reduction of dynamic risk factors (Simons & Tyler, 2010, Simons, Yates, Kingston & Tyler, 2009).

As a comprehensive rehabilitation framework, the GLM can accommodate all the valuable aspects of the RNR, however the reverse is not true. Therefore, the GLM has greater scope and applicability. In addition, it coheres well with desistence research that stipulates that a number of social, cognitive, and environmental factors are associated with desistence from offending. “The GLM’s strong social ecological orientation, and its emphasis on a range of primary goods that are easily mapped onto the different desistence domains, makes it a natural conduit between the correctional and criminological research traditions” (Ward, Yates & Willis, 2012, pg. 108). It is an alternative approach to the RNR that explicitly incorporates the three principles of risk, need and responsivity. Additionally, it has the ability to integrate aspects that are inadequately incorporated in the RNR such as the development of therapeutic alliance, increased agency, and motivation and commitment to live an offence free life (Ward & Fortune, 2013).

Laws and Ward (2011) argue that the absence of particular goods is more strongly correlated to offending behaviours than others. These include: 1) self-efficacy/sense of agency, 2) inner peace, 3) personal dignity/social esteem, 4) generative roles and relationships (work, leisure), and 5) social relatedness. However, Laws and Ward offer no data to support this claim and it could be argued that some of these goods are similar to non-criminogenic needs, such as personal dignity transferable as self-esteem. While, Laws and Ward suggest that the GLM has empirical support they fail to demonstrate this claim. While there appears to be some evidence to support the principles of positive psychology, it is
unknown if these approaches are effective with offender populations (Looman & Abracen, 2013).

In terms of support for the GLM, Ward and colleagues described case examples to illustrate the application of the GLM principles with offenders. These case studies, however, fail to demonstrate effectiveness in reducing recidivism and to determine if the GLM is more effective in addressing criminogenic needs compared to other treatment approaches. To date there are two studies that investigate the effectiveness of GLM approaches compared to treatment as usual; however, neither of these studies looked at recidivism rates post treatment and both studies were limited to sexual offenders. The results of both studies were that there were no differences overall in relation to attrition and the reduction of dynamic risk factors (Looman & Abracen, 2013).

According to Looman and Abracen, (2013) the GLM primary human goods could be perceived as inverse restatements of the Big Eight risk factors via the lens of humanistic psychology. While the RNR and GLM uses different terminology where the language of RNR is focused more on deficits compared to strengths and positive psychology in the GLM, the RNR does not prescribe how the three principles are applied. RNR’s concepts address similar concepts as the GLM, therefore it is argued that the GLM offers nothing new other than different terminology and focus. The suggestion to use positive language and focus on approach goals rather than avoidance goals is simply a reminder of best practice (Looman & Abracen, 2013). A further criticism of the GLM is related to its humanistic approach to treatment. This is potentially problematic as research has consistently demonstrated that cognitive behavioural approaches are the most appropriate and effective with offender populations.
4.7 Locating Substance Use Disorders and Complex Posttraumatic Disorder within the Risks, Needs and Responsivity and Good Lives Models.

In the RNR model, substance use is generally accepted as being a criminogenic need; however, it also falls within the risk and responsivity factors. Substance use or increased substance use generally leads to an increase in offending behaviours, particularly those of acquisitive and violent offences (Department of Justice, 2008). Acquisitive offences are generally committed for the purpose of acquiring goods and money used to support a drug or alcohol dependence and violent offences can occur due to a lack of inhibition directly caused by alcohol or other drug intake (Department of Justice, 2008). In relation to responsivity, offenders may be less responsive to treatment if substance affected or experiencing withdrawal. In addition, their alcohol and other drug use may be directly related to brain damage impeding the offenders’ intellectual capacity and memory (Department of Justice, 2008).

What the RNR model fails to recognise is that there are offenders who use substances in order to alleviate the pain associated with their experience of trauma. Further, this experience of trauma has likely resulted in self-regulatory deficits which need to be considered a responsivity factor in relation to treatment. According to Skeem, Manchak and Peterson (2010) nearly three out of four prisoners with a serious mental illness have a co-occurring SUD. If we recognise the previously discussed high incidence of comorbidity between Post Traumatic Stress Disorder/Complex Post Traumatic Stress Disorder and Substance Use Disorder, it is important to consider the treatment of trauma in conjunction with the treatment of Substance Use Disorders. Looman and Abracen, (2013) argue that the authors of the GLM also pay insufficient attention to the relevant
empirical literature. For example, that many offenders have a history of trauma and/or serious mental health and that these conditions have been linked to recidivism. “We question whether asking such clients about “inner peace” will make much sense to such client groups and contribute to a feeling of clinical rapport. Our task might be best described as helping such clients make progress with reference to one or more concrete therapeutic goals (i.e., decreasing their use of alcohol and/or drugs) (Looman and Abracen, 2013, p. 35).” Further, Looman and Abracen (2013) argue that this criticism also applies to the RNR as it ignores issues associated with trauma. Andrews and Bonta (2010) also continue to argue that there is no relationship between mental health and recidivism despite this being contradicted by the findings of more recent research. Looman and Abracen (2013) suggest that the RNR model needs to take into account the recent empirical literature regarding therapeutic alliance and the changing needs of offender populations such as prior traumatic experiences and mental illness.

According to Skeem et al. (2010), there are suggestions that mentally ill offenders are at disproportionate risk due to having more general risk factors for recidivism when compared to offenders without mental illness. This perspective is consistent with the social perspective that denotes that these offenders are at risk not because they are mentally ill but because they experience more key factors that establish and maintain criminal activity. For example, mentally ill offenders tend to live in disadvantaged neighbourhoods, are unemployed, have victimisation histories, abuse alcohol and other drugs and associate with antisocial peers. While each of these factors has been linked to offending, the extent to which they play a casual role has yet to be established. Age of onset for criminal behaviour may be a potential moderator. According to Hodgins and
Müller-Isberner (2000) there are two types of offenders with mental illness, those early start offenders who exhibit a stable pattern of antisocial behaviour from a young age and those late start offenders who exhibit antisocial behaviour only after the onset of mental illness. The distinction between early and late start offenders appears to be that early start offenders are more embedded in and exposed to criminogenic risk factors earlier in themselves and their social environments. With late starters, mental illness appears to play more of a causative role in offending, in particular violent offending (Skeem et al., 2010).

Conversely, the GLM has the potential to recognise the individual needs of offenders and by doing so allows for the exploration of the self-medication hypothesis. It recognises the internal (trauma) and external (substance use) conditions that lead to offending behaviour. While also making distinctions between static and dynamic risk factors, the GLM aims to facilitate conditions required to better equip offenders to cope with static risk factors. For example, employment is a factor that may increase the positive outcomes of individuals with comorbid PTSD and SUD. These individuals may find work as a meaningful and satisfying way to expand the broader social and economic networks in their lives. According to Jason et al., (2011) “people with psychological disorders who are able to work derive internalised values and satisfaction from their work related experiences. They value their independence and perceive themselves as able to influence their environment, a factor that is positively associated with mental health” (p. 177). Whilst employment has significant advantages to a person’s well-being both financially and mentally, it is often difficult for people with PTSD to obtain and sustain employment. Savoca and Rosenheck (2000) found that individuals with PTSD are less likely to be employed and that this
diagnosis has a greater negative effect on unemployment than lower years of education. Additionally, Silverman et al. (2002) found that individuals with SUD are more likely to achieve abstinence when employment was factored into their treatment plan. It is possible that employment may not only improve mental health but also influence positive substance use outcomes (Jason et al., 2011). If one considers the nine classes of primary needs presented by Ward and Brown (2004) earlier, developmental trauma arguably transcends across all domains and must be worthy of consideration in treatment planning.

4.6 Chapter Summary

Within this Chapter is a discussion between the difference in criminogenic and non-criminogenic needs as defined by the three theoretical forensic models (PCC, RNR and GLM). As previously established, substance use is considered a criminogenic need and mental disorder a responsivity issue, which may be particularly relevant to the common pathologies (PTSD) linked to trauma. However, developmental trauma is considered a non-criminogenic need which therefore means that if targeted in isolation without the intervention addressing criminogenic needs such as substance use and mental disorder, such treatment would be ineffective to reducing offending. In the event that individuals who had experienced developmental trauma develop symptoms at clinically significant levels to meet criteria for diagnosis and criminogenic need, this conceptualisation would not be so problematic. As there is a vast number of individuals that self-medicate symptoms of developmental trauma in the absence of PTSD, it may be beneficial to rely on the GLM as this model factors in a more collaborative and holistic approach to treatment.
Chapter 5: Best Practice Considerations

5.1 Chapter Overview

The previous chapter focused on specific forensic frameworks that consider developmental trauma and substance abuse as risk factors whether criminogenic or non-criminogenic. This chapter aims to extend this discussion to consider the clinical factors that need to be considered when working with dually diagnosed individuals. It aims to highlight the differential diagnostic complexities and supports the argument that a distinct complex PTSD diagnosis is necessary to capture the functional impairment seen in individuals with chronic developmental trauma histories. This chapter also presents a number of concurrent treatments and the efficacy research behind these. Finally, particular treatment considerations in relation to attrition rates, interactive and moderating effects and distress tolerance will be discussed.

5.2 Integrated Assessment and Treatment for Dual Diagnosis

In the alcohol and other drug sector there is a high prevalence of co-occurring anxiety and depression, post-traumatic stress disorder and personality disorders. Research has demonstrated that people with mental health or substance use disorders are at increased risk of also developing the other disorder. For example, individuals with SUD have been found to consistently have higher rates of Axis I pathology when compared to the general population (Croton, 2007; Teesson et al., 2009). One such pathology that is disproportionately detected in alcohol and other drug treatment settings is PTSD. Research has indicated that 50 percent of the clients engaged in alcohol and other drug treatment also meet criteria for PTSD, compared to eight percent of the general population (Berenz, Rowe, Schumacher, Stasiewicz, & Coffey, 2012; Henslee & Coffey, 2010).
Alcohol and other drug treatment service data from the US National Comorbidity, Australian epidemiological study and a New Zealand study found one in three clients were diagnosed with current PTSD (Benton, Deering & Adamson, 2012).

Comorbid PTSD and SUD results in a far more complex clinical profile compared to individuals with only PTSD or SUD. Clients with comorbid conditions present with significant impairments, including interpersonal and medical issues, as well as a lack of motivation and treatment compliance (Benton et al., 2012). Clinicians are faced with challenges working in these arenas as research has found that these individuals improve less during treatment and relapse more quickly following abstinences (Benton et al., 2012). Also, clients with PTSD tend to report stronger cravings for alcohol and other drugs and relapse quicker post treatment. This may be due to a number of factors including the failure to screen for PTSD and treat or refer on, and the client’s intense emotional lability. These factors will be discussed in more detail later in the chapter. It is critical to provide assessment and treatment for both SUD and PTSD (Berenz et al., 2012). Early identification of comorbidity leads to the development of effective treatment, yet even some of the most experienced clinicians often fail to recognise a co-occurring condition, and do not assess or respond appropriately to this. It is important to consider that for clients with comorbid substance use and mental health disorders, these disorders often influence each other in their development, severity, response to treatment and relapse. When a clinician attempts to treat either disorder without recognising and responding to the other condition, treatment is less likely to be effective (Croton, 2007).
The data on the impact of dual diagnosis on treatment response is mixed and inconsistent. According to the Australian Guidelines for the treatment of Acute Stress Disorder and PTSD there are several studies that identify depression, generalised anxiety disorder, borderline personality disorder, anger, alcohol dependence, social alienation and emotional dysregulation as negatively influencing outcomes (Nikerson, Steel, Bryant, Brooks, & Silove, 2011; Smid, Lensvelt-Mulders, Knipscheer, Gersons, & Kleber, 2011; Van der Kolk, Van der Hart, & Marmar, 1996). Conversely, other studies have failed to find an effect of comorbidity on treatment outcome, which suggests that this influence may be sample specific or that the predictive components are yet to be identified (Norris, 1992; Tarrier, Sommerfield, Pilgrim, and Humphreys, 1999). When treating comorbid conditions, the extent to which this is tackled before, during or following PTSD treatment is determined by the treating clinician; however, some studies suggest treating these conditions simultaneously, such as the Concurrent Treatment of PTSD and Cocaine Dependence and the Seeking Safety Program (Croton, 2007; Teesson et al., 2009). These combined treatments will be discussed in further detail later in the chapter. There is some limited evidence that favours combined SUD and PTSD treatment (Weis 2010). Simultaneous treatment is most commonly characterised by educative and symptom-focused cognitive behavioural interventions for both conditions prior to the introduction of trauma focused interventions such as exposure. There is no conclusive research on the temporal course of improvement in comorbid PTSD and SUD; however, Price-Robertson, Bromfield, and Vassallo (2010) suggest that initial improvement in PTSD severity results in decreased substance use, whilst Tarrier et al. (1999)
suggest that a decrease in substance use is likely to affect the severity of PTSD symptoms (ACPMH, 2013).

Historically the diagnoses of PTSD and SUD have been approached with separate treatment considerations and it is only recently that an integrated approach to the treatment of these conditions has been considered in both research and practice (Weis, 2010). There is a growing body of literature that suggests that PTSD can be effectively treated concurrently with SUD (Henslee & Coffey, 2010; Morrissey et al., 2005; Weis, 2010). Current intervention research on dual diagnoses indicates the need to integrate mental health and alcohol and other drug services at a clinical level (Drake, O’Neal & Wallach, 2008). The concept of integration arose in the 1980s in the United States when it was observed that clients suffering from mental and substance use disorders were highly unlikely to receive treatment for both conditions. Rather, clients would be assigned to one of the services, which would view the presenting problem from their perspective. In the case where one of the services would refer to the other in order to treat both conditions, these service interventions were found to be incompatible or inconsistent (Drake et al., 2008). There are two fundamental concerns that would be addressed by integrated treatment. First, it would improve access by ensuring that mental health and alcohol and other drug services are available in the same setting. Secondly, it would improve the development of individual treatment plans by tailoring these to the specific needs of the client and provide interventions that are coherent (Drake et al., 2008).

Brady, Back and Coffey (2004) estimated that between 36 percent and 50 percent of people in substance abuse treatment meet criteria for both PTSD and SUD. This overrepresentation is often explained by symptoms of one of the
disorders triggering or magnifying the symptoms of the other. Souza and Spates (2008) posit that despite conflicting empirical evidence, the majority of treatment providers continue to view SUD as the primary diagnosis. Consequently PTSD treatment accessibility only occurs when the individual is abstinent and this requirement exists despite the acknowledgement that the symptoms of PTSD adversely impact on relapse prevention (Henslee & Coffey, 2010; Weis, 2010). Research has indicated that people with PTSD report that when their PTSD symptoms worsen, their substance misuse symptoms also worsen and vice versa. Coffey, Stasiewicz, Hughes and Brimo (2006) demonstrated that reducing trauma related negative affect via exposure therapy reduces cravings (Henslee & Coffey, 2010). Evolving treatment approaches denote that therapeutic work for both disorders cannot and should not be separated. Recovery from both SUD and PTSD are similar in that the individual may not be able to change the circumstances that created the emergence of the condition, but rather are encouraged to alter their reactions to PTSD symptoms that may trigger relapse (Weis, 2010).

While it has been established that many people with SUD have been exposed to numerous potentially traumatic events throughout their lifetime, a thorough psychological assessment is still necessary to warrant a diagnosis of PTSD (Henslee & Coffey, 2010). According to Croton, (2007) screening is a component of an assessment in that it is a brief method of determining whether another particular condition is present. If results from a screen indicate the possibility that another condition is present this should trigger a detailed assessment that will either confirm or deny the presence of this condition. Subsequently, assessment of both conditions will inform the development of
treatment plans to address both disorders. Therefore, the ultimate aim of screening is to increase the detection of co-occurring disorders and to indicate when a more detailed assessment is required, whereas, the ultimate aim of assessment of co-occurring disorders is to develop effective integrated treatment plans.

According to the guiding principles outlined by the Victorian Dual Diagnoses Initiative (Croton, 2007), screening and/or assessment for co-occurring disorders should take place at or near client’s first contact, as early detection contributes to effective, targeted treatment planning. At the commencement of treatment and throughout, the clients’ self-reported PTSD symptoms can be quickly and easily measured with screening tools such as the Modified PTSD Symptom Scale (mPSS) and the Impact of Event Scale-Revised (IES-R). The modified PTSD symptom scale-self report (MPSS-SR) (Falsetti, Resnick, Resick, & Kilpatruick, 1993) is a 17 item scale used to assess the frequency and severity of PTSD symptoms in accordance with the DSM-IV-TR. The impact of Event Scale-Revised (IES-R; Weiss & Marmar, 1997) is a widely used, reliable and valid measure of trauma related symptoms experienced in the past week and has been used with substance abusing clients. The utilisation of such brief screening tools also aids in the determination of the clients progress during treatment (Henslee & Coffey, 2010). Further, the guiding principles indicate that where possible, clients should receive integrated treatment for co-occurring disorders. “Integrated treatment occurs when a clinician provides treatment for both a client’s substance use and mental health problems. Integrated treatment also occurs when staff or separate agencies work together to agree and implement an individual treatment plan. This integration needs to continue beyond acute
intervention and through recovery by way of formal interaction and cooperation between agencies in reassessing and treating the client” (Croton, 2007, p. 6).

Croton (2007) posited that it is not uncommon for mental health or alcohol and other drug treatment to be underway before it becomes apparent that a co-occurring disorder exists, which detrimentally impacts on treatment. This could be attributed to clinicians assuming that particular persons are more likely to have particular disorders. The consequence of this could be that only some people are screened. People with a mental health or substance use disorder are at higher risk of developing the other disorder, therefore, people receiving services for either disorder should be screened or assessed for a co-occurring disorder (Croton, 2007). Clinicians working within alcohol and other drug treatment services are encouraged to consider the client’s potential PTSD symptomology. It is essential, for these clinicians to determine how to treat or refer on for the treatment of these symptoms in the context of their client’s recovery from SUD. Clinicians are encouraged to conduct thorough assessment of trauma exposures and current symptomology and if warranted and sufficiently skilled, initiate trauma intervention quickly (Henslee & Coffey, 2010).

The limited but available research on integrated treatment posits modestly superior outcomes. Drake et al. (2008) conducted a meta-analysis of 45 controlled studies to explore the psychosocial intervention research for individuals with comorbid substance use and mental health disorders. They found that group counselling, residential treatment and case management showed fairly consistent positive results on substance use outcomes. In respect to individual counselling based on motivational interviewing and/or cognitive behavioural therapy, they found effectiveness evidence to be relatively weak and inconsistent.
Barrowclough et al., (2001) conducted a long term study involving nine months of individual counselling utilising motivational interviewing and cognitive behavioural interventions. They found some positive results at nine, 12 and 18 months, however most of the experimental differences on substance use and other outcomes were not sustained post 18 months (Drake et al., 2008).

In relation to group interventions, the evidence consistently demonstrated positive impacts on substance use outcomes and other (non-symptom) outcomes. Many of the research results on group interventions indicated that these were becoming more specific, standardised and effective. For example, Bellack, Bennett, Gearon, Brown, Yang (2006) found positive outcomes in many areas resulting from highly specified, multi-intervention approaches (cognitive behavioural therapy, skills training, case management) for clients diagnosed with schizophrenia and substance use disorders, however the attrition rate was high (Drake et al., 2008). The limited results for family intervention were positive on substance use and other outcomes at various stages within the treatment episode, however most of these faded once the intervention finished. Drake et al. (2008) concluded that family intervention had not been sufficiently studied as either a stand-alone or combined intervention. Their review of the effectiveness of intensive case management indicated that this may be a vehicle for integrated treatment, however the effects on substance use vary depending on the specific interventions utilised within the case management model. The outcomes that they found in relation to residential rehabilitation dual diagnoses treatment were positive and it was the only treatment that has demonstrated effectiveness with non-responders. However, these results should be interpreted with caution as they are limited by the researchers’ lack of true experimental methods. In relation to
legal interventions, they concluded that forensically involved dual diagnoses treatment is only recently emerging and represents another understudied area (Drake et al., 2008).

There are a number of legal interventions available including jail diversion, post release and other forms of mandated treatment or monitoring, however only jail diversion and post release programs have been studied to date. Jail diversion programs deal with criminal matters outside of the court system.

They often engage treatment providers, with hopes of the individual avoiding acquiring a criminal record (Victorian Legal Aid, 2013). Drake et al. (2008) meta-analysis identified five legal intervention studies that were all quasi-experimental. Aside from these treatments being mandated, the services offered varied considerably. Of these limited studies, results indicated an increase in service utilisation and some effects on a wide range of other outcomes. Specifically, Sacks, Sacks, McKendrick, Banks, and Stommel (2004) conducted a quasi-experiment comparing outcomes 12 months post release from prison involving 185 incarcerated men with dual diagnoses. Participants were either involved in an integrated outpatient mental health and substance abuse treatment unit for 12 months followed by six months participation in a modified therapeutic community or only six months of the modified therapeutic community. A therapeutic community involves participants residing in a controlled environment where they actively participate in their own treatment and set their own rules and regulations (Gunderson & Gabbard, 2000). While no improvements in mental health were evident in either group, for those involved with the more intensive treatment there was a reduction in substance use, relAPe rate, severity of use, intoxication and substance related offending. They also found that the more
intensive integrated treatment group had decreased incarceration and further decreases in criminal activity (Drake et al., 2008).

Clients, who appear in specific types of settings such as prisons and therapeutic communities, often require special interventions to address their needs. For example, dual diagnosis clients within forensic setting respond poorly to services that do not account for their special needs (Drake et al., 2008). In spite of this recognition, there is no consistent approach that ensures providers take into account trauma when providing diagnoses and treatment to offenders. Bloom, Owen and Covington (2003) noted the failure of female correctional facilities to take into account women’s trauma histories when determining their treatment needs. Due to the high incidence of trauma histories within offender populations, both men and women need treatment that is tailored to address post traumatic symptomology. The prevalence of trauma symptoms within prisons has received very little research attention. Further, the consequence of post traumatic reactions on offenders’ health and quality of life has been practically ignored (Wolff et al., 2009). Miller and Najavitis (2012) also recognise the incidence of trauma in the lives of offenders and stress the importance trauma-informed care in prison populations which had been termed trauma-informed correctional care (TICC). As prisons provoke unavoidable triggers such as discipline and restricted movement, these are likely to increase trauma-related symptoms and behaviours that may be difficult for prison staff to manage. Miller and Najavitis (2012) stress the importance of introducing trauma-informed principles to manage and stabilise offenders. Further, they suggest introducing trauma-orientated psychotherapies with the main goals being public safety, safety of prisoners and staff, rehabilitation and institutional security. Future research and the implementation
of programs for offenders that focus on the role of unresolved trauma is required to determine the antisocial trajectories of these offenders (Ardino, 2012).

There are however, effective treatments for PTSD such as Prolonged Exposure Therapy, and these treatments have also been found to render beneficial outcomes with offenders. People with PTSD frequently relive the traumatic event via re-experiencing. If extinction of this re-experiencing does not occur this can lead to chronic PTSD and diminished functioning. Often the memories of the trauma are so aversive and anxiety provoking that the whole memory is deliberately not recalled and processed otherwise known as traumatic amnesia. Prolonged Exposure Therapy aims to expose the client to the fear stimulus which recreates the emotional and cognitive states of the traumatic memory which enables desensitisation and habituation. Foa and Rothbaum (1998) recommend Prolonged Exposure Therapy as well as Cognitive Restructuring for those individuals who suffer from guilt, shame and anger. They describe the purpose of cognitive restructuring as being able to minimise negative thought and teach the client to develop more realistic, coping beliefs (Hosking & Walsh, 2005; Henslee & Coffey, 2010).

Prolonged Exposure therapy is a cognitive behavioural approach that has been found to be one of the most effective treatments for PTSD. Consequently, it is reasonable to suggest that it should be considered as an adjunct to alcohol and other drug treatment with dually diagnosed clients. It involves psycho-education, breathing retraining, in vivo exposure and imaginal exposure. The psychoeducational phase involves providing information to clients about PTSD, its onset and maintenance and an overview of the mechanisms behind the treatment. Breathing retraining involves providing clients with a relaxation
strategy to use when managing the distress elicited in exposure. In vivo exposure involves the client and therapist identifying safe, trauma related situations that are feared and avoided, and systematically and repeatedly engaging in those situations until the anxiety diminishes. The imaginal exposure requires clients to recount their most distressing trauma in the present tense repeatedly in session for 45-60 minutes without stopping. Themes that arise are then processed for the remainder of the session. The therapist records the imaginal exposure and clients are asked to listen to this recording daily which allows for further emotional processing of the event. Sessions are generally 90 minutes in duration for a period of 9-12 sessions (Berenz et al., 2012; Henslee & Coffey, 2010).

Berenz et al. (2012) presented four case studies describing individuals with PTSD who were attending residential alcohol and other drug treatment service and received both prolonged exposure therapy and alcohol and other drug treatment. These clients demonstrated successful PTSD treatment within this setting. Significantly, none of the clients met criteria for PTSD post treatment and maintained these improvements at three and six month follow ups. Further, prolonged exposure therapy was not found to lead to treatment disengagement nor increased substance use post treatment. These case studies demonstrated the feasibility of conducting prolonged exposure therapy within the constraints of residential treatment. Further, contrary to current practice norms and beliefs, preliminary data does suggest that the use of exposure therapy with alcohol and other drug clients does not negatively affect the rate of attrition compared to other interventions. This finding remains even though the retention of clients with comorbid PTSD and SUD has frequently been problematic in clinical studies (Henslee & Coffey, 2010).
Wolff et al. (2009) recommend the following principles when applying trauma interventions to correctional settings. First, treatment should address comorbid conditions simultaneously. Second, trauma related symptoms should be treated in ordered stages (safety, recognition, education, skill building) to assist in the development of effective coping and life skills that replace destructive coping behaviours such as self-harm and alcohol and other drug use. Third, trauma interventions must be chosen with the environment in mind. Wolff, Shi and Siegel argue that trauma processing interventions such as exposure therapy and cognitive restructuring require environments that are conducive with healing and support, which is not the case within prisons (Wolff et al., 2009). Additionally, as with most psychological conditions, therapeutic alliance is a good indicator of treatment outcome. The difficulty arises when those individuals with complex trauma presentations are reluctant to engage or trust the development of the therapeutic relationship. In most of these cases, genuine empathy and regard for the individual as well as easing them into the therapy via psycho-education and symptom management will result in this difficulty being overcome. It has been suggested that more time needs to be focused on the development of therapeutic alliance with these individuals prior to engaging in trauma-focused interventions (ACPMH, 2013).

It is the belief of Ford et al. (2007) that the “recovery from PTSD is complementary with the recovery from SUD because the recovery from PTSD involves learning how to deal with unfinished emotional business resulting from trauma without denial and with personal responsibility (i.e., sobriety) (p.477).” One such treatment that models Ford et al.’s sentiments is the TARGET program. The TARGET therapeutic approach combines integrated PTSD and SUD
treatment within a holistic model. It first focuses on psycho-education about trauma response and its connection to SUD and then comprises skills training. This model also includes an experiential phase designed to facilitate the clients’ re-experience of the trauma memory in the context of safety. Another such treatment, the ATRIUM model developed by Miller first introduces clients to normal trauma response, substance use recovery and a rationale behind the treatment. The second phase focuses on processing emotionally based responses to the trauma in the context of their substance use. This is followed by focusing on the somatic experiencing of traumatic events and is finalised with the reviewal of spiritual health in the context of relationships and connections with people and nature (Miller, 2002). Underlying these phases are four major principles. The first principle includes a focus on reframing PTSD and SUD symptoms as adaptive reactions and coping strategies to real or perceived threatening situations. Principle two denotes that abstinence is achieved and maintained. Principle three focuses on the rescripting of trauma stories to include protective mechanisms to alter the client’s habitual response to the world. The fourth principle stresses the importance of strong connections with people and the world. These four phases and principles are considered exemplary in the integrated and holistic treatment of SUD and co-occurring PTSD (Benton et al., 2012; Henslee & Coffey, 2010; Weis, 2010).

The Concurrent Treatment of PTSD and Cocaine Dependence model involves the integration of exposure therapy for PTSD symptoms and skills training for relAPAe prevention. Coffey, Schumacher, Brimo, and Brady (2005) suggested that although the model is specific to cocaine dependence, it is appropriate to use with all substances. Treatment involves 16 sessions of therapy
including psycho-education about the purpose of exposure therapy and the development of coping skills required to manage substance abuse. Once the clients are able to utilise these strategies to manage abstinence, the exposure therapy is initiated. Effective treatment approaches to co-occurring PTSD and SUD utilise cognitive, behavioural, relational and spiritual aspects in synergistic models. Another example of a synergistic model is the “Seeking Safety” (SS) program. Research into the effectiveness of this program has indicated that clients who complete a minimum of six sessions experience significant improvement in functioning. Further, at a three month follow up these clients reduced their substance use and maintained this improvement (Benton et al., 2012; Henslee & Coffey, 2010; Weis, 2010).

Morrissey et al (2005) conducted a large quasi-experimental study involving a number of integrated treatment models including the ATRUIM, TREM and Seeking Safety (SS) models. This research spanned two years and nine intervention sites with nine comparison sites. Results indicated support for the above integrated approaches in the treatment of co-occurring PTSD and SUD, as they found significant symptom reduction in both disorders (Henslee & Coffey, 2010; Weis, 2010). Hien (2009) conducted a large trial of 353 women with PTSD and comorbid substance use and compared Seeking Safety (SS) with Women’s Health Education (WHE). Results indicated that both treatments significantly reduced PTSD symptoms and that these treatment gains were maintained at a 12 month follow up, however in both treatment conditions substance use remained unchanged over time. Zlotnick, Johnson and Najavits (2009) compared SS to treatment as usual in 49 incarcerated women with comorbid PTSD and SUD.
Treatment as usual involved 180-240 hours of individual and group therapy. Results indicated that both treatments were effective in reducing PTSD symptoms, SUD, psychopathology and legal problems with no significant differences between treatments. Further, upon six months post release from prison, 53 percent of the women in both conditions reported a remission in PTSD (Pietrzak, 2011). The Seeking Safety program has demonstrated efficacy in significantly improving PTSD symptoms and substance abuse; however, it has not demonstrated better outcomes when compared to relapse prevention or health education interventions in randomised clinical trials (Benton et al., 2012; Berenz et al., 2012).

Benton et al. (2012) conducted a study exploring the effectiveness of the Seeking Safety program in a group of 20 women with comorbid PTSD and SUD. They found that there was an overall improvement in the participant’s reductions in the severity of PTSD symptoms, difficulty managing symptoms and behavioural problems. They also found an improvement in interpersonal functioning. These treatment outcomes were sustained and more marked at the six month follow up which was attributed to the participant’s insights and skills taking time to be applied. Other results indicated that whilst substance use generally diminished at the six month follow up, for some participants there was a significant increase in use. This finding is consistent with other research that has found high rates of relapse within this population group post treatment. While the program did not focus on nicotine use, a reduction across time was evidenced. This positive outcome is important not only from a health perspective but also because the prevalence rates of smoking are significantly higher in people suffering from PTSD, 45 percent compared to 23 percent of the general
population. A possible limitation of this study is that many of the participants were on pharmacotherapy, in particular SSRI’s, which may have affected the results. Further complicating this limitation was that information regarding medication compliance was not obtained (Benton et al., 2012).

The New Zealand guidelines for the treatment of co-occurring PTSD and SUD strongly recommend the use of integrated treatment (Benton et al., 2012). The Australian Guidelines suggest a combination of psychological therapy and pharmacotherapy to enhance treatment response in those individuals with more severe PTSD or those that have not responded to either intervention in isolation. Hetrick, Purcell, Garner, and Parslow (2010) conducted a Cochrane systematic review to assess whether the combination of psychological therapy and pharmacotherapy was more efficacious when compared to these inventions used in isolation. Results from the review indicated that there were no significant differences in outcome between the all groups that received combined interventions and the groups that received psychological therapy or pharmacotherapy. However, Hetrick et al. cautioned that there were too few studies (four trials with 124 participants) to be able to draw definitive conclusions. Jacobsen, Southwick and Kosten (2001) questioned the effects of prescription medication for the treatment of mental disorders. It is their belief that the effects of commonly prescribed medications for the treatment of PTSD on SUD recovery are unknown (Jacobsen et al., 2001).

Despite the existence of efficacious PTSD treatments, alcohol and other drug treatment providers rarely include treatment that addresses co-occurring anxiety and mood disorders. Instead and more commonly, alcohol and other drug clinicians refer these clients to other providers. This, however, is problematic as
only a third of clients follow through with these referrals. Ideally comorbidity
would be addressed in the initial setting the client presents, but there are a number
of barriers that prevent this occurring. Such barriers include staffing issues,
insufficient training and expertise, management support and physical resources
(Berenz et al., 2012). Further, some therapists assume that they can only apply a
trauma treatment model with clients who have been diagnosed with PTSD.
However, many experts in the field stress that a history of severe developmental
trauma necessitates using a carefully paced trauma treatment model, even in the
absence of a diagnosis of PTSD or CPTSD (Centre for Addiction and Mental
Health, 2003)

Najavits, Kivlahan and Kosten, (2011) conducted a nationwide American
survey consisting of 205 Veterans Affairs staff. The staff were asked about their
views on eleven therapeutic interventions for PTSD, SUD and comorbid
PTSD/SUD. They found that the top models for intervention included supportive
therapy, CBT and relapse prevention, with EMDR being the least utilised
intervention. Clinicians rated Seeking Safety and relapse prevention as being the
most helpful and EMDR and contingency management as the least. Regarding
their desire for training in a particular intervention the clinicians ranked Seeking
Safety, Exposure Therapy, Cognitive Processing Therapy and Dialectical
Behaviour Therapy highly. The 12-step program and supportive counselling was
ranked the lowest. The analysis revealed themes related to: a desire to be better
trained on the various interventions and issues relevant for PTSD and SUD
treatment; having more guidance on the safety and use of PTSD treatments within
a SUD treatment context; and more focus on non-abstinence based interventions.
One limitation to this study was the failure to explore specific clinician factors in
relation to the results found. Previous research has indicated that particular clinician factors play a role on the type of chosen intervention. For example clinicians in academic settings tend to value more theory and evidence based interventions compared to community clinicians. Further, cognitive behavioural clinicians tend to be more positive about manualised treatment than psychodynamically orientated clinicians. Likewise, less experienced clinicians are more positive about treatment manuals than more experienced clinicians (Najavits et al., 2011).

5.3 Best Practice Assessment Considerations

Individuals that have experienced prolonged or repeated exposures to trauma are more likely to experience associated features of PTSD including somatic concerns, interpersonal and affective dysregulation and identity disturbance (ACPMH, 2013). Clinicians need to be aware that there is a substantial overlap between complex PTSD and Borderline Personality Disorder. Consequently careful assessment is required to differentiate between the two diagnoses (ACPMH, 2013). Further, considering the prevalence rates of PTSD and SUD found in vulnerable populations with extensive histories of abuse and service utilisation, it is imperative that alcohol and other drug and mental health services in the community and within Corrections routinely screen, assess and treat these conditions (Benton et al., 2012).

Disorders of Extreme Stress Not Otherwise Specified (DESNOS) and PTSD are conceptualised by some scholars as overlapping and sharing predictors, whereas others believe that the two diagnoses are relatively independent and differ in phenomenology and functional impairment (Nemčić-Moro et al., 2011). The diagnosis of PTSD has been significantly utilised since its formulation,
however there have been consistent arguments that it only partially covers the range of post traumatic psychopathology. Clinicians and researchers alike have argued that the current diagnosis does not address the complicated and enduring symptomatology associated with exposure to prolonged and repeated trauma such as developmental trauma and war captivity (Zerach & Solomon, 2013). The relationship between DESNOS and PTSD remains unclear. One position is that DESNOS is an associated feature of PTSD, as the predictors of both disorders are likely to be the same. This position gained support from the DSM-IV Field Trial study that found a considerable overlap between the disorders (Collings, 2013).

Another position is that these disorders differ in functional impairment and phenomenology, and are therefore independent of one another (Nemćić-Moro et al., 2011). Understanding the differences and similarities between the two disorders will aid in the development of more sensitive clinical diagnoses and the development of more efficacious treatment strategies (Zerach & Solomon, 2013).

According to Ford (2011), both the construct and operationalisation of DESNOS is controversial. It was not included as a diagnostic category in the fourth and fifth edition of the DSM; however its symptoms were listed as associated features of PTSD. The rationale behind this was partially based on the findings that most individuals who met criteria for DESNOS also met criteria for PTSD. Van der Kolk et al., (1996) concluded that the symptoms of DESNOS are best conceptualised as “associated features of PTSD that aren’t likely to constitute separate double diagnoses but represent the complex somatic, cognitive, affective and behavioural effects of psychological trauma” (pp. 89-90). Yet, this assertion is contrary to the PTSD Field Trial data that did not show dissociation, somatisation, and affect dysregulation to be isomorphic with PTSD.
with each of these symptoms sharing only 26 to 28 percent of its variance with PTSD. One can conclude from this finding that despite DESNOS’s strong correlation with PTSD, features of DESNOS may still occur independently of PTSD. Indeed, many trauma survivors who did not meet criteria for PTSD met the DESNOS criteria for dissociation (61%), somatisation (47%) and affect dysregulation (34% to 37%) (Dell & O’Neil, 2009).

Ford (1999) replicated the PTSD Field Trial’s study to determine (1) an association between PTSD and DESNOS and (2) the etiological distinction between the two disorders. In particular he found that DESNOS was associated with interpersonal developmental trauma and that PTSD was found to be associated specifically to war zone trauma and witnessing war atrocities. However, DESNOS was related to participation in war zone activities. Further, Ford found that DESNOS was associated with extreme levels of intrusive symptoms, impaired functioning such as compromised object relations and high utilisation of inpatient acute psychiatric care. Posttraumatic Stress Disorder and DESNOS co-occurred in 60 percent of the veterans in this study, resulting in a conclusion that these condition were highly comorbid but not necessarily isomorphic. In fact, almost 50 percent of individuals with DESNOS did not meet the criteria for PTSD, which was contrary to the finding in the DSM Field Trial where only eight percent of individuals with DESNOS did not have PTSD. Disorders of Extreme Stress Not Otherwise Specified was often accompanied by depression and ASPD or BPD, which is consistent with the view that DESNOS is a complex variant of PTSD (Dell & O’Neil, 2009). This is particularly relevant to offenders given the high incidence of developmental trauma and comorbid personality pathology experienced. It is also interesting to consider if the
personality pathology emerged alongside the DESNOS in response to the developmental trauma or as a consequence of DESNOS pathology such as self-regulative deficits.

There are only a few empirical studies that have examined and validated DESNOS as a diagnostic construct. To date, there are limited studies investigating the prevalence of DESNOS in severely traumatised populations. Only 18 studies show that DESNOS is prevalent in BPD clients and a further 19 studies have examined it among combat veterans (Zerach & Solomon, 2013). Zerach and Solomon (2013) assessed PTSD and DESNOS symptoms and their interrelations among ex-prisoners of war. The study depicted a high number of DESNOS symptom clusters alongside PTSD symptoms and highlighted the complex relationship between the two disorders. Specifically the study revealed moderate relations between the total number of PTSD symptoms and DESNOS symptoms and weak to moderate relations between the two diagnostic symptom clusters. These findings were inconsistent with the Field Trials that found a 92 percent comorbidity rate. They concluded that DESNOS characteristics could be considered associated features of PTSD, but also that PTSD symptoms are the core foundation of DESNOS (Zerach & Solomon, 2013).

There is a paucity of studies that have examined the risk factors associated with DESNOS. However, some have found a high incidence of DESNOS in adults who have experienced developmental trauma (Zerach & Solomon, 2013). Further evidence of the singularity of DESNOS arises from the treatment outcome data. In Ford’s (1999) sample, individuals with DESNOS had poorer treatment outcomes than individuals with PTSD as evidenced by higher rates of attrition even after controlling for child abuse, depression and personality
disorder (Dell & O’Neil, 2009). According to Ford (2013), for DESNOS to become an accepted psychiatric disorder, an organising paradigm and biopsychosocial mechanism will be needed. He argues that dissociation could play an instrumental role in this paradigm, as dissociation appears to contribute to each of the other five features of DESNOS (Ford, 2013). Importantly, complex PTSD symptoms are rarely assessed and are often excluded from PTSD treatment efficacy studies due to comorbidity. However, these symptoms have important implications for trauma treatment outcome. While DESNOS is not routinely assessed, there is evidence that some of the areas of impairment found in DESNOS such as a disturbed sense of self and relations with others contribute to treatment outcomes (Lee, 2012).

5.4 Best Practice Treatment Considerations

There is a growing body of literature that suggests that PTSD can be effectively treated concurrently with SUD (Henslee & Coffey, 2010). However, there are also high rates of non-completion in integrated treatment for PTSD and SUD. This suggests that individuals with comorbid PTSD and SUD are at greater risk of non-completion regardless of treatment type. Back, Danksy, Carroll, Foa, and Brady (2001) found that 62 percent of clients did not complete (absence of six out of the 16 sessions) the Concurrent Treatment of PTSD and Cocaine Dependence. Najavitis Weiss, Shaw, and Muenz (1998) evaluated the treatment completion of those clients who participated in the Seeking Safety integrated treatment and found a non-completion rate of 45 percent, which was consistent with Hien et al’s (2009) replicated study that found 54 percent failed to complete (Tull et al., 2013).
McDonagh et al. (2005) conducted a randomised trial of cognitive
behavioural therapy in an outpatient facility for women who had a history of
childhood sexual abuse. They found that 41 percent of the participants that were
randomised into the CBT group were non-completers compared to 23 percent for
the overall study. While PTSD scores did not differ between completers and non-
completers, there were significant differences found in other psychosocial
domains. Specifically, non-completers experienced more depressive and anxiety
symptomology, had more distorted schemas about self and others and reported
having lower quality of life. Additionally, the non-completers had experienced
more severe childhood trauma, including a greater frequency of physical and
sexual abuse as well as a perception of greater threat. These findings support the
argument that DESNOS represents post traumatic characterological changes that
are difficult to treat with standard PTSD treatments and procedures (Lee, 2012).

Post-Traumatic Stress Disorder differs from other disorders in that
symptoms are likely to be exacerbated during the initial period of abstinence,
which makes alcohol and other drug treatment particularly challenging. It has
been hypothesised that this increase in symptomology may be due to the
symptoms of withdrawal, which mirror arousal symptoms such as difficulty
sleeping, restlessness, tremors and nausea (Benton et al., 2012). Stress also
exacerbates emotional dysregulation, which may exacerbate symptoms and lead
to relapse. When you consider the neurobiology of SUD, mood and anxiety
disorders, which have been found to overlap in neural circuitry, this exacerbation
is unsurprising. Further supporting this are client self-reports that the use of
depressants significantly improve PTSD symptoms. It has also been proposed that
the negative emotions seen in PTSD function to maintain alcohol dependence (Benton et al., 2012).

Tull et al. (2013) examined the interactive effects of PTSD and low distress tolerance on the completion of residential SUD treatment. They also explored the moderating role of gender, as previous research results have been mixed. Given the relevance of antisocial personality disorder to both PTSD and SUD treatment completion, analysis controlled for court ordered treatment, criminal behaviour and impulsive behaviour, including aggressive behaviour, spending sprees, risky sexual behaviour and other antisocial behaviours. They found that male SUD clients with a current diagnosis of PTSD and low distress tolerance were less likely to complete treatment compared to all other male SUD clients, indicating that distress tolerance in men may play an important role in treatment completion (Tull et al., 2013). These results suggest that clients may benefit from learning distress tolerance skills such as those found in the intervention Skills for Improving Distress Intolerance. This treatment involves six sessions and has been found to significantly improve distress tolerance among clients in residential alcohol and other drug treatment facilities. Similarly, the incorporation of skills from Dialectical Behaviour Therapy has been found to improve treatment retention in alcohol and other drug programs. Incorporating these interventions into alcohol and other drug treatment may increase the ability for clients with PTSD to control their behaviours and manage intense emotions, particularly male clients. Tull et al. recommend that future research that explores the potential differences of perceived and actual distress tolerance on negative clinical outcomes present among comorbid PTSD/SUD clients may help inform the development of more efficacious treatments for this population group.
Furthermore, future research would benefit from exploring whether individuals have differing distress tolerance for specific emotional states (Tull et al., 2013).

There is a growing body of research that indicates that the manifestation of PTSD is influenced by individual differences, such as gender, that result in either externalisation or internalisation of distress. For individuals who externalise their PTSD distress, greater emotional liability, substance abuse, aggressiveness, impulsivity and distrust of others are common features. Miller, Greif, and Smith (2003) also suggested that men are more likely to externalise their PTSD distress compared with women. This claim may account for the results found in the Tull et al.’s (2013) study, where men were found to have less distress tolerance and consequently less treatment completion. Additionally, Miller et al.’s finding that the interactive effect of PTSD, distress tolerance and gender remained significant even when controlling for antisocial personality features, lends further support to this interpretation. A limitation of Miller et al.’s study was that antisocial personality disorder was not formally assessed. Future studies would benefit from this assessment so that the interaction of ASPD, PTSD and low distress tolerance can be explored in the context of SUD treatment completion (Tull et al., 2013).

Though completion rates for integrated PTSD and SUD treatment is poor, approximately 50 percent of clients do complete. Future research is necessary to identify the factors that could moderate the relationship between the co-occurring conditions and treatment completion. A possible factor that needs to be considered is distress tolerance, which is defined as the willingness to withstand aversive psychological states (Simons & Gaher, 2005). Emerging research has suggested that PTSD symptom severity is associated with low distress tolerance and it has also been found to be a motivating factor for the use of substances to
manage PTSD symptoms. Additionally, low distress tolerance has been found to be associated with relapse and treatment attrition (Tull et al., 2013). Simple and complex post-traumatic stress responses differ thus requiring an understanding of the comparative definitions. Also necessary, is determining what aspects of complex and simple post-traumatic stress responses clients have in order to tailor treatment approaches to the individuals specific needs (Centre for Addiction and Mental Health, 2003).

Recognising DESNOS in traumatised groups is important to the development of effective treatment plans. Treatment for PTSD is only completely successful in 30 percent of cases and only partially successful in another 30 percent. The remaining 40 percent show no treatment gains. It is possible that the latter group of clients suffer from both PTSD and DESNOS, as several studies have demonstrated that DESNOS has a negative impact on treatment outcome. The treatment of PTSD involves focusing on processing specific traumatic experiences and memories. With clients who suffer from DESNOS, the focus of treatment is on managing other problems, such as emotion regulation, dissociation and interpersonal difficulties. This is due to the functional impairment of DESNOS being more severe than that seen in PTSD. At present, the clinical census for the treatment of complex trauma involves three primary stages: (1) symptom reduction and stabilisation, (2) processing of traumatic memories and emotions and (3) life integration and rehabilitation after trauma processing (Nemčić-Moro et al., 2011).

Clinicians may feel confused about how to proceed with treatment if a client has been given a diagnosis other than PTSD. According to Saakvitne,
Gamble, Pearlman, and Lev (2000) “there is not a single diagnosis that is applicable to all abuse survivor clients; rather, individuals carrying any diagnosis can be survivors. Often survivors carry many diagnoses. Abuse survivors may meet criteria or diagnoses of substances dependence and abuse, personality disorders (especially BPD), depression, anxiety (including PTSD), dissociative disorders, and eating disorders, to name a few” (p.7). Those clinicians without indepth and specialised training in trauma assessment and treatment may not recognise the effects of trauma appropriately. Consequently, some of the diagnoses given to trauma survivors by professionals not well versed in trauma assessment need to be treated with considerable caution, and the validity of these may require re-examination as a result. It is a difficult task to diagnose individuals who have suffered from repeated developmental trauma. Many present with only physical symptoms or with other more general difficulties such as chronic insomnia, anxiety or relationship instability/conflict. Unless the clinician asks questions about trauma, the connection between current symptoms and abuse history may be overlooked. Further, failure to make this connection can result in the clinician only acquiring a partial understanding of the client’s symptoms resulting in a fragmented approach to treatment (Centre for Addiction and Mental Health, 2003).

5.5 Chapter Summary

This chapter further stressed the high comorbidity rates of PTSD and SUD, and discussed the consequent complexity of these individuals’ presentation and potential impact on their treatment progression. These factors necessitate integrated assessment and treatment for these individuals that have been recommended by the Victorian Dual Diagnosis Initiative. Given the high incidence of developmental trauma in offender populations, routine assessment of
DESNOS should be completed alongside PTSD assessment if trauma symptomatology has been detected. Further, concurrent treatments such as the Seeking Safety Program take into account the clinical implications of working with these individuals holistically and effectively. Whilst there are a number of recommendations made in the literature, clinically there appears to be a divide in enacting these best practice principles.
Chapter 6: Current Study

6.1 Rationale

There is a considerable body of evidence showing that trauma and victimisation are over represented in offender populations, and that substance use is also over represented within this population (Smith & Ecob, 2007). The associations between victimisation histories and a range of psychological problems, substance misuse and criminal involvement do not necessarily imply simple causative relationships. They do, however, suggest a complex adaption to traumatic experiences, in which multiple behavioural problems, including antisocial activity, may be intertwined and may perhaps be mutually reinforcing and/or exacerbating (Rumgay, 2004).

According to Rumgay (2004), acknowledging an offender’s plight as a victim enables collusion with excuses for the crime and exoneration from personal responsibility. Similarly a rehabilitation program that acknowledges the offender’s victimisation history is suspected of focussing on personal need at the expense of criminogenic factors (Rumgay, 2004). These assumptions overlook the evidence that recovery from the trauma of victimisation is a challenging process that cannot succeed without active participation of the sufferers. This predicament has been exacerbated in recent years by the previously discussed literature that purports to identify a range of specifically criminogenic problems that directly increase the likelihood of offending. Based upon this claim, there has been considerable investment in the production and promotion of rehabilitation programs designed to target these problems. In this pursuit of effective practice, criminogenic needs are contrasted with other types of problems that are deemed unrelated to offending behaviour and on which, by implication, the rehabilitation
clinician, however well meaning, would waste valuable time in an ineffective
eendeavour to reduce offending. Absence of abuse among the currently recognised
 criminogenic needs has been regarded by some as a problem of deficiency in
existing research (Rumgay, 2004).

6.2 Aims of the Current Research

The current research aims to explore the incidence of developmental trauma
and the incidence and patterns of trauma symptoms in offenders. The five
developmental trauma types that will be explored in isolation and combination
include: sexual abuse (i.e., rape, molestation, etc.), physical abuse (i.e., hitting,
kicking, etc.) emotional abuse (i.e., name calling, etc.), physical neglect (i.e., not
providing basic human needs such as food and clothing) and emotional neglect
(i.e., withholding affection, etc.). In particular, it aims to underline the over
representation of developmental trauma and substance use in offenders and, via
psychometric data, and interviews with offenders and clinicians, to shed light on
the nature of these relationships and investigate the possibility of self-medication
within this sample. A further aim is to investigate the relationship between overall
PTSD symptom scores with emotional abuse, emotional neglect and physical
neglect, an area that has limited available research. There are a number of
exploratory aims for the present research. Some of these are qualitative, such as
exploring the link between participants’ substance use and offending, while
others involve the use of descriptive statistics to inform the presentation of these
participants such as typical substance use patterns within a 90 day period. This
time period was selected as the offenders substance use was captured within the
alcohol and other drug services assessment proforma within the last seven days
and 90 days. It was decided by the author that reporting the client’s substance use
across 90 days would be more representative of their typical use compared to only a seven day period.

As previously discussed, there are a number of common complex trauma symptoms, but of particular interest are those symptoms related to emotional regulation and hyper arousal. The ability to dissociate from these symptoms through use of substances is particularly pertinent to the current study. Understanding both treating clinicians and offender (participant) attributions of the role of developmental trauma and substance use in offending will allow for qualitative analysis to further enhance our treatment frameworks. Further, it will allow for the critical analysis of applicability of the Risks, Needs and Responsivity and Good Lives Model in respect to the treatment of substance use and developmental trauma.

6.3 Hypotheses of the Current Research

The present research had a number of hypotheses to explore:

1. That participants will have a higher incidence of single and multiple forms of developmental trauma compared with a community sample.

2. That there will be a significant positive relationship between physical abuse severity and sexual abuse severity on the CTQ and overall PTSD symptom scores.

3. That participants who endorse a history of any of the five developmental trauma as measured by the CTQ will claim to use substances to self-medicate.

4. That participants with either PTSD or Complex PTSD will report depressant use as their dominant substance.
5. That participants who report using substances within 90 days from assessment will be more likely to report acquisitive offending as their index offence than other offence types.

6. That those participants with Complex PTSD as determined by the Structured Interview for Disorders of Extreme Stress (SIDES) will have a higher rate of committing violent offences compared to those participants with PTSD alone.

7. That participants who report depressants as their primary substance will have higher intrusive symptom scores on the PTSD Symptom Scale compared to stimulant users.

8. That violent offenders will endorse more clinically significant scores on four subscales of the Alterations in Regulation of Affect and Impulses scale (self-destructive, excessive risk taking, affect regulation and modulation of anger) as measured by the SIIDES compared to other types of offenders.

6.4 Method

The current study utilised a mixed method approach involving both quantitative and qualitative methodology. The quantitative component was designed to analyse the incidence and trajectory of developmental trauma in substance using offenders, while, the qualitative component was designed to analyse the participants’ (offenders) and their treating clinicians’ narratives around the function of their (clients) offending and substance use.

6.4.1 Participants

A total of 50 participants from the State of Victoria participated in the study. Participants were recruited from Caraniche and Regen (formally Moreland Hall), two of Melbourne’s largest metropolitan alcohol and other drug treatment
services. At the time of recruitment, the participants were engaged in alcohol and other drug treatment, predominantly forensic counselling services within the above mentioned agencies. Further, participants were identified by their treating clinicians to be forensic clients that were on community based dispositions, such as drug diversion orders, community treatment orders and parole orders. A number of clinicians (social workers, counsellors and psychologists) employed by both Caraniche and Regen assisted in the recruitment, organisation and participation of the study by providing qualitative responses about the participants. These clinicians responded on multiple occasions in relation to a number of their clients. Consequently the exact number of clinicians who participated in the qualitative component is unknown. Further detail regarding this process will be provided within the procedures section later in the chapter.

6.4.2 Participant demographics

Participants were largely found to be a good overall representation of Australian Offenders. Nighty-two percent of participants were male and eight percent female. The participants’ ages ranged from 20 years through to 61 years with the mean age being 35 years old. According to the Australian Bureau of Statistics (ABS; 2014) 82 percent of offenders on community based orders were male and 18 percent female. Table 1.1 indicated that 38 percent of participants had stable accommodation (public/private rental, own home), 40 percent were in short term or emergency accommodation (couch surfing, living temporarily with friends and family) and eight percent were homeless (sleeping on the streets, parks, cars etc.). These results somewhat differed with those found in The Health of Australian Prisoners Report, where 66 percent of offenders about to enter prison identified having stable accommodation, 28 percent reported being in short
term or emergency accommodation and seven percent identified as being homeless (Australian Institute of Health and Welfare, 2013). It is possible that the main reason for the differences were the high proportion of participants that were on parole having lost their stable accommodation whilst being incarcerated.

Further, 68 percent of the participants were unemployed and this may also be a contributing factor to the higher rates of unstable accommodation. According to The Health of Australian Prisoners Report, only 48 percent of offenders about to enter prison identified themselves as unemployed (Australian Institute of Health and Welfare, 2013). Again, it’s possible that the differences in these demographics are attributable to the consequences of being incarcerated, and the difficulties of acquiring and sustaining employment whilst on parole.

Table 1 - Accommodation Status

<table>
<thead>
<tr>
<th>Accommodation Status</th>
<th>Frequency</th>
<th>Percent (%)</th>
<th>Valid Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>43</td>
<td>86.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Private Rental</td>
<td>9</td>
<td>18.00</td>
<td>20.90</td>
</tr>
<tr>
<td>Public Housing</td>
<td>3</td>
<td>6.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Own Home</td>
<td>6</td>
<td>12.00</td>
<td>14.00</td>
</tr>
<tr>
<td>Supported Accommodation</td>
<td>1</td>
<td>2.00</td>
<td>2.30</td>
</tr>
<tr>
<td>Homeless</td>
<td>4</td>
<td>8.00</td>
<td>9.30</td>
</tr>
<tr>
<td>Boarding House</td>
<td>2</td>
<td>4.00</td>
<td>4.70</td>
</tr>
<tr>
<td>Couch Surfing</td>
<td>5</td>
<td>10.00</td>
<td>11.60</td>
</tr>
<tr>
<td>With Family Members</td>
<td>13</td>
<td>26.00</td>
<td>30.20</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.00</td>
<td></td>
</tr>
<tr>
<td>Missing System</td>
<td>7</td>
<td>14.00</td>
<td></td>
</tr>
</tbody>
</table>
Table 1.2 illustrates the highest level of education achieved among participants. Interestingly, 24 percent of the participants had achieved higher education levels (completion of Tafe and/or university degrees). Eight percent had completed year 12, six percent had completed year 11, 14 percent had completed year 10, another 14 percent had completed year 9 and six percent had completed year 8 or below. These demographics are somewhat different to those found in The Health of Australian Prisoners Report, suggesting that the current study’s participants were better educated compared to general offender statistics. The Health of Australian Prisoners Report did not capture education levels beyond year 12; however 17 percent of offenders completed year 12, 10 percent completed year 11, 38 percent completed year 10 and 34 percent had completed year 9 and below (Australian Institute of Health and Welfare, 2013). Given that the current study had less participants completing year 11 and 12, but more participants completing higher education, it is possible that this difference can be explained by the differing parameters of each study.

Table 2 - Highest Level of Education

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 7</td>
<td>1</td>
<td>2.00</td>
<td>2.70</td>
</tr>
<tr>
<td>Grade 8</td>
<td>2</td>
<td>4.00</td>
<td>5.40</td>
</tr>
<tr>
<td>Grade 9</td>
<td>7</td>
<td>14.00</td>
<td>18.90</td>
</tr>
<tr>
<td>Grade 10</td>
<td>7</td>
<td>14.00</td>
<td>18.90</td>
</tr>
<tr>
<td>Grade 11</td>
<td>3</td>
<td>6.00</td>
<td>8.10</td>
</tr>
<tr>
<td>Grade 12</td>
<td>4</td>
<td>8.00</td>
<td>10.80</td>
</tr>
<tr>
<td>Tafe</td>
<td>9</td>
<td>18.00</td>
<td>24.30</td>
</tr>
<tr>
<td>Higher Education</td>
<td>4</td>
<td>8.00</td>
<td>10.80</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>74.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>13</td>
<td>26.00</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>
PsyCheck is a screening tool used to respond to mental health issues within alcohol and other drug treatment (Lee et al., 2007). The tool was routinely used by the participating agencies and scores were captured within the alcohol and other drug assessment. Scores from the PsyCheck tool indicated that of the 33 participants, 25 participants had a score of five or above, which is indicative of the person suffering significant distress at the time of assessment. An additional four participants were screened using the Kessler Psychological Distress Scale (K10), a measure used to screen populations on psychological distress (Kessler & Mroczek, 1994). The K10 scores were captured within the alcohol and other drug assessment, and of these four, three were suffering from high psychological distress. In summary 37 participants were screened for mental illness using either PsyCheck or the K10 and of these, 28 had scores that suggest that the participants were suffering significant psychological distress. Further, of the 26 participants who completed the mPSS, 11 had scores indicative of currently suffering PTSD. Of the 32 participants who completed the SIDES-SR, seven participants had scores that reflected a lifetime presence of CPTSD and three participants had scores that indicated that they were currently suffering from CPTSD. Thirty-two percent of the samples participants were being treated with either mental illness or substance abuse pharmacotherapy. This is a little more than that reported in The Health of Australian Prisoners Report (21 percent) possibly due to the participants currently being engaged in alcohol and other drug treatment and consequently having access to prescribing practitioners (Australian Institute of Health and Welfare, 2013). This is despite a large proportion of offenders reporting mental health condition (46%) and 38 percent of offenders reporting having high to very high levels of psychological distress compared to 11 percent
of the general population reporting these levels of psychological distress (Australian Institute of Health and Welfare, 2013).

Of the 45 participants whose alcohol and other drug assessment was available to the researcher, 58 percent used depressants and 32 percent used stimulants as their primary substance. Further, 74 percent of the participants were assessed as being a current polysubstance user (using more than one substance at any given time). Table 1.3 illustrates the participants age of first use for each of the substances. On average alcohol and cannabis were the earliest used substances (M = 14.55 and M = 14.71 respectively). As reported in Table 1.3, many of the other substances were first used in late adolescence and early adulthood, however benzodiazepines and morphine had the oldest age of first use (M = 28 and M = 33 respectively).

**Table 3 – Participants’ Age of First Use**

<table>
<thead>
<tr>
<th>Substance</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of First Cocaine Use</td>
<td>8</td>
<td>15</td>
<td>30</td>
<td>21.63</td>
<td>5.528</td>
</tr>
<tr>
<td>Age of First Speed Use</td>
<td>26</td>
<td>11</td>
<td>43</td>
<td>21.69</td>
<td>8.461</td>
</tr>
<tr>
<td>Age of First Ecstasy Use</td>
<td>14</td>
<td>15</td>
<td>30</td>
<td>19.50</td>
<td>4.848</td>
</tr>
<tr>
<td>Age of First Methamphetamine Use</td>
<td>30</td>
<td>11</td>
<td>47</td>
<td>25.70</td>
<td>9.545</td>
</tr>
<tr>
<td>Age of First Heroin Use</td>
<td>18</td>
<td>11</td>
<td>41</td>
<td>22.94</td>
<td>7.810</td>
</tr>
<tr>
<td>Age of First Cannabis Use</td>
<td>38</td>
<td>8</td>
<td>26</td>
<td>14.71</td>
<td>5.013</td>
</tr>
<tr>
<td>Age of First LSD Use</td>
<td>9</td>
<td>12</td>
<td>26</td>
<td>18.89</td>
<td>4.936</td>
</tr>
<tr>
<td>Age of First Benzodiazepine Abuse</td>
<td>17</td>
<td>17</td>
<td>47</td>
<td>28.41</td>
<td>9.507</td>
</tr>
<tr>
<td>Age of First Morphine Abuse</td>
<td>5</td>
<td>23</td>
<td>40</td>
<td>33.00</td>
<td>7.314</td>
</tr>
<tr>
<td>Age of First Alcohol Abuse</td>
<td>38</td>
<td>4</td>
<td>24</td>
<td>14.55</td>
<td>3.944</td>
</tr>
</tbody>
</table>

According to The Health of Australian Prisoners Report, 54 percent of offenders about to be released from prison reported drinking alcohol at risky
levels prior to their imprisonment (Australian Institute of Health and Welfare, 2013). Further, 70 percent of offenders reported using illicit drugs in the twelve months prior to their incarceration (Australian Institute of Health and Welfare, 2013). These rates of alcohol and other drug abuse, similar to those found in Table 1.4, are substantially higher than those found in the general community. According to the Australian Institute of Health and Welfare (2007), 35 percent of Australians drank alcohol at levels that were considered high risk for short term harm, and only 10 percent of Australians drank at levels considered high risk for long term harm. Consistent with the results found in Table 1.4, cannabis was found to be the most common illicit drug used. However, 76 percent of the samples participants had ever used cannabis compared to 34 percent of the general community (Australian Institute of Health and Welfare, 2007). The Health of Australian Prisoners Report reported the following findings based on offenders self-report of substances 12 months prior to incarceration: 50 percent had used cannabis, 37 percent had used methamphetamine, 16 percent had used benzodiazepines, 13 percent had used analgesics (i.e., morphine), 15 percent had used heroin, nine percent had used ecstasy, 22 percent had used cocaine, and four percent had used hallucinogens (Australian Institute of Health and Welfare, 2013). Whilst the figures found in Table 1.4 are higher than those reported above, this is likely due to the time frame that this drug use was being measured. Regardless, these results are consistent in illustrating a significant over representation of alcohol and other drug abuse in offenders compared to the general community.
Table 4 - Participant Substances Every Used

<table>
<thead>
<tr>
<th>Drug</th>
<th>Frequency</th>
<th>Percent (%)</th>
<th>Valid Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cocaine</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td>22.00</td>
<td>24.40</td>
</tr>
<tr>
<td>No</td>
<td>34</td>
<td>68.00</td>
<td>75.60</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>29</td>
<td>58.00</td>
<td>64.40</td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>32.00</td>
<td>35.60</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td><strong>Ecstasy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>17</td>
<td>34.00</td>
<td>37.80</td>
</tr>
<tr>
<td>No</td>
<td>28</td>
<td>56.00</td>
<td>62.20</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td><strong>Methamphetamines</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>31</td>
<td>62.00</td>
<td>68.90</td>
</tr>
<tr>
<td>No</td>
<td>14</td>
<td>28.00</td>
<td>31.10</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td><strong>Heroin</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>42.00</td>
<td>46.70</td>
</tr>
<tr>
<td>No</td>
<td>24</td>
<td>48.00</td>
<td>53.30</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td><strong>Cannabis</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>38</td>
<td>76.00</td>
<td>84.40</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>14.00</td>
<td>15.60</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td><strong>LSD</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td>22.00</td>
<td>24.40</td>
</tr>
<tr>
<td>No</td>
<td>34</td>
<td>68.00</td>
<td>75.60</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td><strong>Benzodiazepines</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Abused)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>18</td>
<td>36.00</td>
<td>40.00</td>
</tr>
<tr>
<td>No</td>
<td>27</td>
<td>54.00</td>
<td>60.00</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td><strong>Morphine (Abused)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>12.00</td>
<td>13.30</td>
</tr>
<tr>
<td>No</td>
<td>39</td>
<td>78.00</td>
<td>86.70</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td><strong>Alcohol (Abused)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>43</td>
<td>86.00</td>
<td>95.60</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>4.00</td>
<td>4.40</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.00</td>
<td></td>
</tr>
</tbody>
</table>
Table 1.5 illustrates the type of offences reported in the participant’s alcohol and other drug assessment. These offence types were based on self-reports as well as collateral information available to the alcohol and other drug clinician who had originally assessed the participant upon entering the service. Further, the information on offence types captured in Table 1.5 only pertains to the participants’ index offence. Therefore, even if a participant had a long history of offending and/or had multiple offences, only their most current and serious offence was classified below. As represented in Table 1.5, violent and drug offences were the dominant index offences perpetrated by the participants. This was followed by theft and bad public behaviour offences.

Table 5 - Index Offence Hierarchy

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violence</td>
<td>10</td>
<td>20.00</td>
<td>23.80</td>
</tr>
<tr>
<td>Sexual Assault</td>
<td>2</td>
<td>4.00</td>
<td>4.80</td>
</tr>
<tr>
<td>Property Damage</td>
<td>3</td>
<td>6.00</td>
<td>7.10</td>
</tr>
<tr>
<td>Weapon Offences</td>
<td>1</td>
<td>2.00</td>
<td>2.40</td>
</tr>
<tr>
<td>Stalking</td>
<td>3</td>
<td>6.00</td>
<td>7.10</td>
</tr>
<tr>
<td>Drug Offences</td>
<td>10</td>
<td>20.00</td>
<td>23.80</td>
</tr>
<tr>
<td>Theft Offences</td>
<td>7</td>
<td>14.00</td>
<td>16.70</td>
</tr>
<tr>
<td>Breach of Legal Order</td>
<td>1</td>
<td>2.00</td>
<td>2.40</td>
</tr>
<tr>
<td>Bad Public Behaviour</td>
<td>5</td>
<td>10.00</td>
<td>11.90</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>84.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Missing System</td>
<td>8</td>
<td>16.00</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>
6.4.3 Materials

Once identified as a forensic client, participants were given the Plain Language Statement, Consent Form and Revocation of Consent Form (Refer to Appendix A) by their treating clinician. This document outlined the purpose of the study, information about confidentiality and anonymity, and relevant details should the participant choose to contact the researcher. The clinicians were also provided with Plain Language Statements when the researcher attended regular staff meetings (Refer to Appendix B).

If participants were recruited from Caraniche they were asked to sign an authority to release form that would give researchers access to their alcohol and other drug assessment that had been completed by external providers (ACSO) (refer to Appendix C). At the completion of the clinical interview, the researcher asked the participant a number of qualitative questions about their offending, alcohol and other drug use and mental health. This part of the interview was recorded on a proforma developed by the researcher to capture the participants’ narrative about these issues (see Appendix D for the list of questions). A similar proforma was provided to the participants’ treating clinician to answer qualitative questions about their client (see Appendix E for the list of questions).

Participants were also provided with a statement of participation to sign at the completion of data collection to ensure that he/she had received their $20 Coles/Myer gift voucher for participating (see Appendix F).

6.4.4 Measures

To measure the incidence and type of developmental trauma, PTSD and Complex PTSD symptoms that were possibly experienced by participants, the researchers administered a number of psychometric measures: The Childhood
The CTQ is a 25-item retrospective self-report questionnaire designed to assess five types of developmental traumas (three additional items assessing tendencies to minimise or deny abuse are excluded). The Emotional Neglect subscale reflects the degree to which respondents’ emotional needs were not met (e.g., “I felt loved” reversed scored). The Emotional Abuse Subscale reflects the degree to which respondents were verbally demeaned or felt humiliated (e.g., “People in my family called me things like stupid, lazy, or ugly”). The Physical Neglect subscale reflects the degree to which respondents’ physical needs were not met (e.g., “I didn’t have enough to eat”). The Physical Abuse subscale reflects the degree to which respondents were physically assaulted in ways that might result in injury (e.g., “I was punished with a belt, a board, a cord, or some other hard object”). The Sexual Abuse subscale reflects respondents’ experience of coercive sexual contact (e.g., “Someone tried to make me do sexual things or watch sexual things”). Each subscale is composed of five items and respondents rate the truth of each item on a scale from one (never true) to five (very often) in relation to when they were growing up. The scores range from five to 25 for each of the abuse types. In the current study, responses were linked to the entire “growing up” period, without referencing the specific age in childhood. The CTQ has demonstrated reliability and validity, including test-retest reliability coefficients ranging from .79 to .86 over an average of four months, internal consistency reliability coefficients ranging from a median of .66 to a median of
.92 across a range of samples, convergent validity with clinicians ratings of developmental trauma and a consistent five-factor model (Baker & Maiorino, 2010; Scher et al., 2004;).

The modified PTSD Symptom Scale (mPSS) is a 17-item interview used to assist the detection and diagnosis of PTSD symptoms within a two week period preceding interview. The structure and content of the mPSS mirror the DSM-IVTR criteria for PTSD (Khoury et al., 2010). It measures severity of PTSD symptoms and can be used to determine the presence of PTSD in accordance with the DSM’s criteria. Frequency is assessed on a four point scale ranging from zero (not at all) to three (five or more times per week/very much/almost always). Severity is assessed on a five point scale ranging from zero (not at all distressing) to four (extremely distressing). The psychometric properties indicate satisfactory internal consistency, high test-retest reliability and good concurrent validity. It has demonstrated good internal consistency and reliability (Benton et al., 2012). The internal consistency in treatment and community samples has been reported at levels of .96 and .97 respectively. The scales psychometric properties are sound, with a positive predictive power of .91, a negative predictive power of 1.0 and overall convergence with the Structured Clinical Interview for DSM Disorders-PTSD module of .97 (Avant et al., 2011). A total score of 48 and above indicates the presence of PTSD (Benton et al., 2012).

The SIDES-SR is a 45 item scale that assesses the presence and or severity of six individual symptom clusters (1. alteration in regulation of affect and impulses, 2. alterations in attention or consciousness, 3. alterations in self-perception, 4. alterations in relations with other, 5. somatisation, 6. alterations in systems of meaning) that make up the diagnosis of Disorders of Extreme Stress
Not Otherwise Specified (DESNOS). Further, the SIDES-SR is the only instrument to assess symptoms across a person’s lifetime to date, measuring current verses lifetime presence of symptoms. Respondents are asked to endorse the current and lifetime presence of absence of each symptom cluster while also ranking the current severity of the endorsed symptoms (Luxenberg, Spinazzola, & Van der Kolk, 2001). Spinazzola et al. (2001) found reasonable to high rates of internal consistency (α=.93) on the full scale and Cronbach alpha ranging from .74 to .82 for five of the subscales. The somatisation subscale had the lowest internal consistency (α=.68) and it was therefore suggested that results on this subscale should be interpreted with caution (Luxenberg et al., 2001).

The researchers were also granted permission to access the participants’ alcohol and other drug assessment which included a substantial amount of bios-psychosocial history, including demographic data and a history and pattern of the participants substance use. These assessments involve detailed descriptions of the client’s substance use including lifetime frequency, age at first use and most recent use of illegal substances (cannabis, cocaine, methamphetamine, amphetamine, LSD, heroin, inhalants, ecstasy, GHB), as well as the misuse of prescription medication (tranquilisers, sedatives, pain medications, steroids) and alcohol. Within this assessment was another psychometric screening tool to screen for the presence of psychological distress. PsyCheck is comprised of a self-report questionnaire in accordance with the World Health Organisation’s mental health screen, a suicide risk assessment, a brief mental health history and mental health probes. It screens for the likely presence of mental health symptoms that may be addressed within a specialist alcohol and other drug service and it primarily screens for high prevalence conditions such as anxiety.
and depression. However, it also provides some indication of suicide risk and history of psychotic illness (Croton, 2007).

6.4.5 Procedures

Prior to commencing data collection the participating agencies consent was sought and gained (see Appendix J). Once acquired, Deakin University’s institutional ethics approval was obtained (see Appendix K). The recruitment process involved the primary researcher attending a number of pre-arranged meetings with Senior Management at both Regen and Caraniche to negotiate the research design. Once decided, subsequent attendance to regular team meetings were arranged where the primary researcher presented a rationale, explained the process and was available to field questions from clinical staff. After providing the clinicians a plain language statement, it was also explained to clinicians that consent for their participation in the research project was implied. Clinicians were asked to identify forensic clients on their counselling caseloads, to provide the plain language statement to, and acquire a signed consent if the clients chose to participate. Once the consent form was signed and contact details provided therein, the clinician returned this to reception for the researcher to access at a later date. The researcher would contact the agencies via phone to determine if any consent forms had been received. If available, the researcher would physically attend the agencies to retrieve the consent forms and make phone contact with the participants. At this interchange, the researcher identified herself and attempted to arrange a convenient time for the participant to attend the corresponding agency for data collection (clinical interview).

Due to the chaotic lives of these participants, it was often difficult to get a hold of them via telephone and to rely on their attendance even once an
appointment time had been made. When the participants attended the prearranged data collection time (clinical interview), the researcher reiterated the consent and information outlined in the plain language statement, including the process for the following hour and invited them to ask any questions. Further, the researcher explained that the participants’ treating clinician would be available for additional support if required; however, the researcher would also be available to provide containment and referral if requested. At the interview, participants were asked all questions from the three psychometrics (CTQ, mPSS, SIDES-SR), and were also asked seven qualitative questions that had been developed by the researcher to gain a better understanding of the function between participants’ substance use, mental health and offending. Further these questions were developed in light of the GLM, considering what the participant identified as being primary goods. On average the qualitative component of the interview took 15 minutes, with some participants providing detailed responses and others one or two descriptive answers. At the conclusion of the clinical interview, participants were asked to complete the statement of participation, provided their Coles/Myer voucher and were thanked for their time and participation.

The researcher then identified the treating clinician for each participant (either via the participant or through reception staff at each agency), and forwarded the relevant staff member their qualitative questionnaire to respond to about that particular participant. Clinicians were asked to either email the researcher the completed form or to return it to reception for later retrieval. It was at this stage, that the researcher also sought access to the participants’ alcohol and other drug assessment to gain demographic information and substance use history for each participant.
The extensive negotiation with senior management regarding data collection processes coupled with the unreliability of participants and follow up of clinicians, resulted in data collection occurring over a period of 18 months. The termination of data collection was decided by the senior management of both participating agencies, as they considered that they were no longer able to provide ongoing support to the project.

6.4.6 Data Analysis

Quantitative data coding

The statistical analysis of the data obtained from the alcohol and other drug assessment and psychometrics (CTQ, mPSS, SIDES-SR) was performed using the Statistical Package for the Social Sciences (SPSS) version 20.0. A number of quantitative variables were coded in preparation for analysis, including the following demographic variables: age, gender, accommodation status, employment status, highest level of education, and index offence. Within the alcohol and other drug assessment acquired by both of the agencies, substance use was assessed based on lifetime frequency, age at first use and most recent use of illegal substances (cannabis, cocaine, amphetamine, methamphetamine, LSD, heroin, inhalants, ecstasy, GHB), as well as the misuse of prescription medication (tranquilisers, sedatives, pain medications, steroids). The individual substances were combined into the following categories: stimulants (cocaine, ecstasy amphetamine, and methamphetamine), depressants (cannabis, GHB, tranquilisers and sedatives, opioids (pain medications and heroin), and hallucinogens (LSD and PCP). Participants were classified as engaging in non-experimental use if they reported using substances four or more times. Kilpatrick et al., (1997) suggest that this frequency of illicit drug use is similar to that deemed significant
by the substance use screen of the Diagnostic Interview Schedule. Each of the
psychometrics (CTQ, mPSS, SIDES-SR) was coded into SPSS based on the
rating scales within each psychological assessment (refer to measures above for
detailed information).

The analyses involved using parametric quantitative tests including
Spearman’s correlation, Logistic regression and independent samples t-tests.

**Qualitative data coding**

Qualitative data was derived from the questions asked of both participants
and participants’ treating clinicians about respondents’ beliefs about the function
of their substance use and offending and what they considered their primary
goods in accordance to the GLM. In total, 64 percent of the respondents provided
responses to the qualitative questions.

Initially, the qualitative data was transcribed and paired into a Microsoft
document, as a verbatim full-text record of the responses. The data were
examined and coded using a phenomenological approach originally developed by
Giorgi (1985) and subsequently expanded upon by other researchers (Strauss &
Corbin, 1998) to uncover key themes. The phenomenological method that was
utilised involved three basic interlocking steps: (1) phonological reduction,
(2) description, and (3) search for essences (Giorgi, 1997). In accordance with
Giorgi (1997) description of the human scientific phenomenological method,
these three steps will be broken down into concrete stages. The data was coded
and then analysed based on thematic analysis and involved the following stages:
familiarisation with the data, identification and documentation of patterns and
themes, defining and describing the themes and synthesising the data. This
approach involved comparison between data and emerging themes resulting in no
predetermined themes, as the themes were determined through the examination of the data (Strauss & Corbin, 1998).

Common themes within the participants and treating clinicians’ responses were co-identified by the researcher and primary supervisor in order to generate commonalities and comparisons within and between the data. This was conducted in order to enhance inter-rater reliability. In total 35 themes were identified across the both clinicians and participants responses to all of the qualitative questions. Of these themes, a number were reoccurring (alcohol and other drug dependency, antisocial modelling, using to escape/cope, relationship stressors and conflict, antisocial peers, unstable accommodation and employment and poor mental health).
Chapter 7: Results

7.1 Quantitative Findings

Prior to the data being analysed using SPSS, a number of screening and exploratory procedures were undertaken to assess for normality. Based on these results, the assumptions of normality were established for the categorical variables; however, transformation was required for some of the continuous variables. A missing value analysis revealed that some of the data was missing; however given that many of the variables were dichotomous, data replacement, such as mean substitution, was not possible in most cases. Even when data replacement options were available, the researcher decided that the missing data would not be replaced and all cases retained. This decision was influenced by the small sample size, and the amount of variability of data available on each participant resulting in mean values being analysis specific. Outliers were inspected and these were determined to be real responses that were important and therefore included in the analysis.

The majority of participant demographic data and psychometric items were coded as categorical variables. Therefore, the association between variables was investigated using Chi square analysis and the contribution of each variable group to PTSD and CPTSD was investigated through the use of Logistic regression. Hence, both types of analyses were assumption free. Data screening on continuous variables involved an evaluation of the distribution of participant responses on these items via t-tests. A square root transformation was required for the following continuous variables on the SIDES-SR, Alterations in Regulation of Affect and Impulses subscale: Self-Destructive, Suicidal Preoccupation and Excessive Risk Taking. However, these transformations did not result in normal
distribution as they did not significantly reduce the positive skewness. While a violation in normality, one would expect skewness given the small sample size, a limitation that will be discussed in more detail within Chapter 9.

Table 1.6 below summarises the participant responses to each of the variables studied indicating the response rate to each of the analysed variables relevant to the hypotheses.

Table 6 - Summary of Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Relevant Hypotheses</th>
<th>Response Rate n = 50 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Neglect</td>
<td>1, 2, 3, 5</td>
<td>48 (96)</td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>1, 2, 5</td>
<td>48 (96)</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>1, 2, 4, 5</td>
<td>48 (96)</td>
</tr>
<tr>
<td>Emotional Abuse</td>
<td>1, 2, 5</td>
<td>48 (96)</td>
</tr>
<tr>
<td>Emotional Abuse</td>
<td>1, 2, 5</td>
<td>48 (96)</td>
</tr>
<tr>
<td>Overall PTSD Score</td>
<td>3, 4</td>
<td>26 (52)</td>
</tr>
<tr>
<td>Self-medicate</td>
<td>5</td>
<td>32 (64)</td>
</tr>
<tr>
<td>Amphetamines and Depressants</td>
<td>6</td>
<td>26 (52)</td>
</tr>
<tr>
<td>Substance use within 90 days</td>
<td>7</td>
<td>42 (84)</td>
</tr>
<tr>
<td>Acquisitive Offence: Dummy Variable</td>
<td>7</td>
<td>42 (84)</td>
</tr>
<tr>
<td>Violent Offence Dummy Variable</td>
<td>8, 10</td>
<td>17 (34)</td>
</tr>
<tr>
<td>Intrusive Symptom Score</td>
<td>9</td>
<td>26 (52)</td>
</tr>
<tr>
<td>Depressants as primary substance type</td>
<td>9</td>
<td>26 (52)</td>
</tr>
<tr>
<td>Alterations in Regulation of Affect</td>
<td>10</td>
<td>31 (62)</td>
</tr>
<tr>
<td>and Impulses scale</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Dummy variables PTSD and Complex PTSD have been excluded from the table as response rates could not be distinguished.
In order to investigate the relationship between overall PTSD symptom scores with emotional abuse, emotional neglect, and physical neglect a Spearman’s correlation was run. It was found that a relationship does exist between PTSD symptoms and each of these developmental trauma types (emotional abuse, emotional neglect and physical neglect), however none of these relationships yielded a statistically significant result ($r = .19, n = 26, p = .35$; $r = .23, n = 26, p = .25$; $r = .22, n = 26, p = .29$ respectively). The possible reason for this will be explored in more detail in the discussion chapter.

To test the first hypothesis, ‘That participants will have a higher incidence of single and multiple forms of developmental trauma compared with a community sample’ chi squares with z tests for differences in proportions were conducted. Results indicated that the current study’s participants experienced significantly ($p = < 0.001$) more forms of abuse (77%) compared to those reported in the comparison community sample (13%). See Table 1.7 presented below that illustrates that across all abuse types the current study’s participants experienced trauma significantly more than those reported in the comparison community sample.

**Table 7 - Comparative Incidence Date for Developmental Trauma**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Current Sample</th>
<th>Community Sample</th>
<th>Difference $\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence of Physical Neglect</td>
<td>60%</td>
<td>22%</td>
<td>37.12*</td>
</tr>
<tr>
<td>Incidence of Physical Abuse</td>
<td>58%</td>
<td>19%</td>
<td>43.13*</td>
</tr>
<tr>
<td>Incidence of Sexual Abuse</td>
<td>33%</td>
<td>5%</td>
<td>62.30*</td>
</tr>
<tr>
<td>Incidence of Emotional Abuse</td>
<td>65%</td>
<td>42%</td>
<td>9.58**</td>
</tr>
<tr>
<td>Incidence of Emotional Neglect</td>
<td>67%</td>
<td>45%</td>
<td>8.63**</td>
</tr>
</tbody>
</table>

*Note: * $p < .001$. ** $p < .005$
In order to test hypothesis two, ‘That there will be a significant positive relationship between physical abuse severity and sexual abuse severity on the CTQ and overall PTSD symptom scores’ Spearman’s correlations were run comparing participants’ physical abuse severity score and sexual abuse severity score on the CTQ and their overall PTSD symptom score. Results indicated a non-significant relationship between these variables respectively ($r = .08, n = 26, p = .67$) ($r = .30, n = 26, p = .14$). This means that physical abuse was not found to be a single related factor for the development and severity of PTSD; however this result must be interpreted with caution due to the small sample size. This means that sexual abuse was not found to be a single related factor for the development and severity of PTSD; however again this result must be interpreted with caution due to the small sample size.

In order to test hypothesis three ‘That participants who endorse a history of any of the five developmental traumas as measured by the CTQ will claim to use substances to self-medicate’ a Logistic regression was conducted. Initial results showed that the intercept only model was able to correctly predict 75 percent of all cases. Including the five developmental trauma types into the model did not change the correct classification. Results showed that when the CTQ trauma types (sexual, physical and emotional abuse, physical and emotional neglect) were entered into the model together, none contributed significantly to participants’ reports of self-medicating ($p = .96$, $p = .58$, $p = .80$, $p = .53$, $p = .88$ respectively). Sexual abuse (odds ratio [OR] = 1.05, 95 percent confidence interval [CI] .14-7.84), physical abuse (OR = 1.83, 95% CI .22-15.40), emotional abuse (OR = .75, 95% CI .08-6.92), emotional neglect (OR = .52, 95% CI .073.94), and physical neglect (OR = .84, 95% CI .08-8.52) were not associated
with the odds of reporting self-medication. The results indicate that there is not a higher probability of reporting self-medication with a particular developmental trauma type.

To test hypothesis four ‘That participants with either PTSD or Complex PTSD will report depressant use as their dominant substance’ a Logistic regression was conducted. Initial results showed that the intercept only model was able to correctly predict 69.2 percent of all cases. Including PTSD and Complex PTSD into the model did not change the correct classification. Results showed that when PTSD and Complex PTSD were entered into the model together, neither contributed significantly to participants’ reports of dominant depressant substance use ($p = .91$, $p = .10$, respectively). Post-Traumatic Stress Disorder (odds ratio [OR] = 1.11, 95 percent confidence interval [CI] .19-6.50) and Complex PTSD (OR = 837267116.80, 95% CI .00) were not associated with the odds of participants reporting depressant use as their primary substance. The results indicate that there is not a higher probability of participants ‘reporting depressant use as their primary substance if diagnosed with PTSD and Complex PTSD.

In order to test hypothesis five ‘That participants who report using substances within 90 days from assessment will be more likely to report acquisitive offending as their index offence than other offence types’ a Logistic regression was conducted. Initial results showed that the intercept only model was able to correctly predict 59.5 percent of all cases. Including substance use within 90 days and acquisitive offending into the model did not change the correct classification. Results showed that when 90 days substance use was entered into the model it did not contribute significantly to
participants’ type of offending ($p = .48$). Substance use within 90 days (odds ratio [OR] = 1.67, 95 percent confidence interval [CI] .40-6.97) was not associated with the odds of participants offending acquisitionally. The results indicate that there is not a higher probability of reporting acquisitive offending when participants have used substances within 90 days.

To test hypothesis six, ‘That those participants with Complex PTSD as determined by the SIDES will have a higher rate of committing violent offences compared to those participants with PTSD alone’ a Logistic regression was conducted. Initial results showed that the intercept only model was able to correctly predict 57.7 percent of all cases. Including PTSD and Complex PTSD into the model increased correct classification to 65.4 percent. However, results showed that when PTSD and Complex PTSD were entered into the model together, neither contributed significantly to participants’ violent offending ($p = .10$, $p = .14$, respectively). PTSD (odds ratio [OR] = .14, 95 percent confidence interval [CI] .01-1.42) and Complex PTSD (OR = 6.29, 95% CI .55-72.05) were not associated with the odds of violent offending. The results indicate that there is not a higher probability of violent offending when participants’ suffered PTSD and Complex PTSD.

In order to test hypothesis seven, ‘That participants who report depressants as their primary substance will have higher intrusive symptom scores on the PTSD Symptom Scale compared to stimulant users’ an independent sample t-test was conducted. The results indicate that there was no significant difference in intrusive symptom scores regardless of the type of classification of substance t (24) = .15, $p = .88$. 
To test hypothesis eight, 'That violent offenders will endorse more clinically significant scores on four subscales of the Alterations in Regulation of Affect and Impulses scale (self-destructive, excessive risk taking, affect regulation and modulation of anger) as measured by the SIIDES compared to other types of offenders' an independent sample t-test was conducted. The results indicate that there was no significant difference between violent and non-violent offenders in the severity of SIDES scores for alterations in regulation of affect and impulses. Self-destructive $t(29) = .93, p = .36$; excessive risk taking $t(29) = .75, p = .46$; affect regulation $t(29) = 1.04, p = .31$; modulation of anger $t(29) = .24, p = .81$.

7.2 Qualitative Findings

The findings presented and discussed below are key themes drawn from the participants’ and treating clinicians’ responses to the qualitative questionnaire. In terms of response rate and missing data, there were 32 participants who completed the qualitative component out of a total of 50 participants. Those participants who completed the mPSS and SIDES-SR were accessible to the researcher to be interviewed about their narrative of the possible relationships between alcohol and other drugs, mental health and offending. The treating clinicians provided narratives about these 32 participants. Each question from the questionnaire will be presented first, and then the themes (across and between) participants’ and treating clinicians will be outlined.

In response to the question ‘What is the primary function/gain of your (or your clients) substance use’ the following themes were noted by both participants and the treating clinicians: (1) self-medicating as described as blocking thoughts, emotions and pain, (2) relaxation, (3) increased energy, alertness and motivation,
(4) increased confidence when socialising and (5) fun and enjoyment of the high. Interestingly the clinicians had an additional two themes that materialised in response to this question about their clients: (1) Dependence and the need to avoid withdrawal and (2) antisocial modelling (social learning theory).

In response to the question ‘What is the primary function/gain of your (or your clients) offending’ the following themes were noted by participants and the treating clinicians: (1) supporting drug use and dependency, (2) financial gain (greed), (3) protection of self and others, (4) expression of self (beliefs/emotions), and (5) escaping/coping strategy. The participants identified three additional themes: (1) revenge, (2) enjoyment and satisfaction and (3) boredom. Further, the treating clinicians identified three additional themes that they attributed as casual to their clients’ offending behaviour: (1) needing to fit in (peer pressure), (2) lack of consequential thinking and (3) relationship stressors and conflicts.

There were two primary themes that emerged in response to the qualitative participant question ‘Do you feel there is a link between your substance use and offending? If so, how?’ Of the 32 respondents, 26 participants indicated that there was a link between their substance use and offending and that this could be attributed to either offending to support/enable drug dependence or offending when substance affected/withdrawing from substances. Of the participants whom indicated no link, no narrative was provided. Further, there were three primary themes that emerged in response to the participant question ‘Do you feel there is a link between your mental health/well-being and substance use? If so how?’ Of the 32 participants who responded, 25 agreed that there was a link and attributed this link to: (1) using alcohol and other drugs to manage mental health symptoms/conditions, (2) using alcohol and other drugs as a coping strategy to
manage life stressors, difficult emotions, thoughts and memories, and (3) that alcohol and other drug use had caused or worsened mental health issues.

In response to the question, ‘What factors do you think makes it difficult to stop using’ the following themes were noted by participants: (1) drug using peers, (2) boredom and a lack of meaningful activity, (3) stress and conflict, (4) availability and access and (5) dependence and habit. Further, in response to the qualitative questions, ‘What factors do you think makes it difficult to stop offending’ the following themes were noted by participants: (1) alcohol and other drug use/dependency, (2) antisocial peers, and (3) financial strain. Interestingly, there were a number of participants who indicated that there are no factors that make it difficult to stop using or offending.

In response to the question, ‘What life experiences, if any, do you think resulted in your client’s offending and why’, the following themes were noted by the treating clinicians: (1) antisocial modelling (social learning theory), (2) antisocial and/or drug using peers, (3) alcohol and other drug use, (4) relationship and family conflict/breakdown, (5) unstable accommodation and/or employment and (6) poor mental health. Further, in response to the qualitative question, ‘What life experiences, if any, do you think resulted in your client’s substance use and why’, the following themes were noted by the treating clinicians: (1) trauma, (2) grief and loss, (3) antisocial modelling, (4) antisocial peers, (5) relationship and family dysfunction, (6) limited coping skills, (7) poor mental health, (8) low self-esteem and (9) unstable employment and accommodation.

In response to the question ‘If you could change or improve one area of your (your clients) functioning or their circumstances what would it be and why’
the following themes were noted by participants and the treating clinicians:

(1) improved physical health and fitness, (2) employment and financial security,
(3) improved relationships, and (4) improved mental health. The participants
identified one additional theme (abstinence from alcohol and other drugs) as did
the treating clinicians (stable accommodation).
8.1 Chapter Overview

The results of the analyses presented in Chapter 7 will be discussed in this chapter with specific reference to the aims and hypotheses of the study that were derived from previous research and theory in the area of forensic psychology, substance use and trauma. Following a discussion of the quantitative and qualitative results, the strengths and limitations of the present study will be outlined. Further, this chapter will conclude with a discussion about the clinical and forensic implications of the study in respect to assessment and treatment recommendations, and future research.

8.2 An Overview of Study Findings

The primary goal of this study was to investigate the role and patterns of the experience of developmental trauma on the trajectory of substance use and offending behaviours. Analyses were conducted with reference to the aims and hypotheses outlined in Chapter 6.

The first aim of the study was to explore the incidence of developmental trauma (physical neglect, physical abuse, emotional neglect, emotional abuse, sexual abuse) in a substance using offender population. It was hypothesised that participants would have a higher incidence of developmental trauma when compared to community samples. This hypothesis was supported with each of the abuse types being experienced significantly more within the study’s participants compared to the community samples. This result is also likely to be under representative of the participants’ experience of developmental trauma as seven of the participants denied or minimised their developmental trauma histories as indicated on the CTQ. Further, these participants also experienced significantly
more multiple forms of developmental trauma compared with community samples. However, these results should be interpreted with some caution as the researcher compared two different community samples that utilised the CTQ and the community samples were not derived in Australia. Of these samples, one involved a meta-analysis of 69 studies. Further the community samples (Baker & Maiorino, 2010; Scher et al., 2004) had a higher rate of female participation compared to the current study, where the dominant gender was male (92%), suggesting that the community samples were not matched and therefore not entirely comparable. Another reason to interpret these results with caution relates to the rate of denial and minimisation that was captured on the CTQ within the current sample. Fourteen percent of participants who completed the CTQ were deemed to have either minimised or denied the extent of their developmental trauma histories. Therefore, it is likely that the incidence of each trauma type was under reported.

In the current study, eleven out of 26 participants who were assessed using the mPSS had PTSD, and only three out of 32 participants who were assessed using the SIDES-SR had current CPTSD. Interestingly, results from the SIDESSR indicated that an additional four participants had suffered from CPTSD in the past but not currently. Further, the PsyCheck results indicated that of the 33 participants who had been assessed with this screening tool, 25 participants had a score of five or above, which is indicative of the person suffering significant distress at the time of assessment (Lee et al., 2007). An additional four participants were screened using the K10 and of these four, according to the scores, three were suffering from high psychological distress (Kessler & Mroczek, 1994). In summary 37 participants were screened for mental illness
using either PsyCheck or the K10 and of these, 28 had scores that suggest significant psychological distress which indicates that upon entering alcohol and other drug treatment, the majority of participants were at least suffering subclinical levels of psychopathology. It is possible that the results from the PsyCheck and K10 had varied from the time of initial assessment to the researchers’ engagement. One could hypothesise that participants’ scores on these screening tools would have decreased across time, indicating improved mental health, due to their engagement in treatment. It is also possible that the participants were less likely to meet criteria for PTSD and CPTSD due to the participants mostly being male. As noted in the introductory chapters, while men report more experiences of trauma compared to women, women often experience more post traumatic symptomatology, and this may be attributed to the type of trauma exposure (Keane, 1995). The externalisation of distress and reduced distress tolerance common in men may account for behavioural dysfunction such as aggression and impulsivity, whereas the internationalisation of distress often seen in women may be directly related to the development of psychopathology (Miller et al., 2003). While also possibly due to gender differences in coping, these results may also be influenced by the high incidence of pharmacological intervention present in the sample.

Dixon et al. (2005) conducted a study where the psychological profile and trauma histories of 100 female juvenile offenders were assessed. They found that 37 percent of the participants suffered from PTSD and sexual abuse was established as a precipitant in 70 percent of these cases. Further, those participants with PTSD had significantly more comorbid diagnoses than those without PTSD and the majority of these comorbid diagnoses appeared
concurrently with or after the onset of PTSD. Specifically, the comorbid diagnoses that were documented across the sample included SUD (92%), CD (91%), depression (55%), anxiety disorders excluding PTSD (24%), ADHD (13%) and psychosis (9%). Consistent with the current study’s findings, Dixon et al. found that those participants who reported experiencing developmental trauma and subsequent PTSD often reported repetitive or multiple forms of abuse rather than single incident trauma. However, the participants who developed PTSD as a result of sexual abuse were equally likely to have experienced repetitive or multiple traumas or single incident trauma. Also similar to the qualitative findings in the current study, within Dixon et al.’s study many of the participants reported that they began using alcohol and other drugs as a means of blocking post traumatic symptoms and that drug related offending began or escalated from this time. Dixon et al. argue that violence and victimization are related to aggressive and delinquent behaviour independent of PTSD. They suggest that while PTSD may not lead directly to aggressive behaviour it may amplify existing behavioural and emotional regulation difficulties (Dixon et al., 2005).

There are a number of clinical implications relevant to the prevalence of developmental trauma found in this study, as well as limitations to the current available literature. This makes interpreting the psychopathology found within the sample somewhat complicated. For decades the developmental trauma literature has focused primarily on the impact of individual abuse types. The Adverse Childhood Experiences (ACE) Study (Anda et al., 2006; Felitti et al., 1998) demonstrated the range of negative long-term effects of developmental trauma and how more types of trauma experiences worsen physical and mental health outcomes over time. An important area yet to be investigated sufficiently is the
There is also a growing body of literature in developmental psychopathology arenas assessing the impact of developmental trauma on certain key symptom clusters such as affect dysregulation and interpersonal difficulties (Davidson, 2002; Dell & O’Neil, 2009; Khantzian & Albanese, 2008). However, this research only focuses on the impact of trauma on specific symptoms rather than the full impact of the traumas across areas of functioning (Kisiel et al., 2013).

As presented in the introductory chapters, Ford et al., (2009) found that children exposed to multiple interpersonal traumas were more likely to have problems with attention, hyperactivity and conduct. Further, these children were found to be more likely to exhibit delinquency, have several diagnoses and poorer clinical outcomes. Comorbidity is common in children who have experienced developmental trauma and there is some evidence to suggest that the number of diagnoses present is positively correlated with the amount of trauma exposures (Kisiel et al, 2013). Healthy individuals typically manage negative mood states such as anxiety, anger and fear; however, the experience of prolonged interpersonal trauma can result in long-term enduring changes to an individuals’ personality that can manifest as behavioural problems. These problems can include explosive anger, compulsive sexuality and self-destructive behaviours, such and self-harm and alcohol and other drug abuse, and function due to problems of affect regulation (Lee, 2012). As discussed in Chapter 2, these problems can be directly linked to the development of Conduct Disorder, Antisocial Personality Disorder and offending behaviours.

The finding that offenders have higher rates of single and multiple experiences of developmental trauma is significant, as many authors have found
negative outcomes to be associated with developmental trauma and subsequent post traumatic symptomatology. Read, Brown and Kahler (2004) found that PTSD was associated with increased comorbid psychiatric distress and poorer substance use outcomes. Ritsher, McKellar, Finney, Otlingam, and Moos (2002) found clients with comorbid conditions were less likely to be in remission and experience higher rates of distress when compared to clients with SUD only (Jason et al., 2011). Further, Khoury et al. (2010) demonstrated that the experience of multiple forms of developmental trauma significantly increased the severity of use for alcohol, cocaine and cannabis, indicating a progressive effect of trauma load on the severity of use of those particular substances. Khoury et al. also found that there were differential effects of abuse type on substance use.

While the current study did not compare the interactive effects of developmental trauma and substance use, the severity of use was captured, as outlined in Chapter 7. This counteracts the argument made by Khoury et al., that most alcohol and other drug studies report substance use, abuse or dependence as categorical variables, failing to capture the severity of use.

Given the high incidence of abuse perpetrated by caregivers as discussed in earlier chapters, it is possible that the offenders within the current study were perpetrated against by their primary caregivers. This abuse in combination with antisocial modelling (transgenerational offending and substance abuse) could result in a vulnerability of these individuals to progress into substance use and offending behaviours in adolescence and early adulthood. This position is supported by the research presented within Chapter 4 on social learning theory and the Psychology of Criminal Conduct. Whilst these theories account well for this trajectory, there still remains a paucity of research exploring offenders’
experience of trauma. As discussed in the introductory chapters and demonstrated in the results of the current study, offenders do experience disproportionally more trauma compared to those in the general population, however the exact psychological mechanisms that underpin these relationships remain unknown.

Further, the consequence of post traumatic reactions on offenders’ health and quality of life is rarely investigated. There appears to be anecdotal evidence in clinical practice that suggests that the impact of trauma is explored in treatment, however this is rarely documented. Interestingly, when the treating clinicians in the current study were asked ‘What life experiences, if any, do you think resulted in your client’s substance use and why’, the primary theme that emerged was trauma, however no further narrative was provided in relation to this.

The existing literature has also demonstrated a relationship between the severity of developmental trauma experience and a later tendency to victimise others (van der Kolk, 2005). This relationship combined with a need to maintain drug dependency, disinhibition from alcohol and other drug use and inter and intrapersonal risk factors (poverty, ASPD, genetics) places an individual at serious risk for future offending behaviours. This offending behaviour often has an earlier onset for these people and can be seen in delinquent behaviour in childhood and adolescence. This too is problematic, as we know that the earlier an individual begins offending, the longer their offending trajectory (Piquero & Moffitt, 2005). Further, the research to date has indicated that individuals who are incarcerated are at higher risk of being re-victimised and that those individuals with post traumatic symptomatology and co-occurring SUD have higher recidivism rates (Ardino, 2012; Dell & O’Neil, 2009). As discussed in the
introductory chapters, these recidivism rates appear to be directly related to self-regulation deficits and acting out behaviours that need to be recognised and targeted in treatment. The cycle of being re-victimised and reoffending is likely to result in the entrenchment in the criminal justice system if preventative, early intervention and treatment is not provided or is insufficient. Due to the neurochemical and structural changes present in the brain that precipitate aggression, pharmacological interventions may also need to be explored as potential appropriate treatments (Davidson, 2002; Williams, 2006).

A further aim of the current study was to investigate the relationship between overall PTSD scores with emotional abuse, emotional neglect and physical neglect. While a relationship was found, this finding was not significant. It is plausible that emotional abuse and neglect and physical neglect do not have enough influence to result in PTSD symptomatology; however, further research with a larger sample size would be needed to provide more conclusive evidence to support this interpretation. Given that this is an area where there is limited research, the fact that a relationship was found suggests that these abuse types should still be considered relevant to the developmental trauma and substance abuse arenas. In Khoury et al.’s (2010) study, emotional abuse was found to be positively correlated with cocaine use, yet according to the DSM, emotional abuse and neglect are not considered traumatic. This interpretation is problematic as it fails to recognise the full range of developmental traumatic experiences relevant to complex PTSD and present in offender populations (Collings, 2013). Clinicians may benefit from using prevalence information to document the extent of childhood abuse and neglect when attempting to gain funding for preventative and treatment interventions. This information may be particularly important in the
cases of emotional abuse and co-occurring developmental trauma as there is little community epidemiological data documenting the prevalence of such experiences. Further, researchers could use the demographic correlates to match preventive interventions to populations and possibly increase the success of such interventions (Sher et al., 2004).

Based on the available prior research that focused on sexual and physical abuse impacts, it was hypothesised that there would be a significant positive relationship between the severity of these two abuse types based on the CTQ and overall PTSD symptom scores. Contrary to previous research, neither physical abuse nor sexual abuse was found to be correlated factors in the development and severity of PTSD. Further, previous research into the consequences of physical and sexual abuse have specifically identified dissociation and somatic complaints as differentiating factors when comparing PTSD and CPTSD (Dorahy et al., 2015). It is possible that this finding is due to the small sample size of the current study as well as the high rate of multiple developmental traumas experienced by the participants, making it difficult to determine single causative and/or related factors. While this study did not specifically investigate the relationship between substance use, and physical and sexual abuse, previous research has added strong support for the self-medication hypothesis based on these experiences.

As Khoury et al. (2010) found in their study, for all of the participants in the current study, physical abuse was correlated with the use of all substances that were examined, and sexual abuse was associated with cocaine and cannabis use. Developmental trauma contributed to increased alcohol and cannabis use independent of adult trauma exposure. A progressive effect of developmental trauma load on PTSD symptomology was also found, where developmental
trauma contributed to higher total PTSD symptoms, as well as higher levels of symptoms in each cluster. When substance dependence was taken into account, only cocaine dependence showed a significant additive relationship with developmental trauma in predicting PTSD severity. It was also the cocaine dependent participants who scored significantly higher on PTSD scores across all clusters (Intrusive: $F = 18.46$, $P < 0.001$; Avoidance/Numbing: $F = 20.91$, $P < 0.001$; and Hyperarousal: $F = 23.07$, $P < 0.001$). However, these findings were no longer significant after controlling for current depressive symptoms that may indicate high comorbidity between PTSD and depression, and a strong relationship between substance use and depression. The strong correlation between cocaine dependence and PTSD symptoms may be due to the effects of the drug as a stimulant that may enhance hyperarousal symptoms in particular (Khoury et al., 2010). While the current study did not investigate the relationship between particular substances and PTSD symptom clusters, it is important to recognise the possible influence that particular substances have on symptom exacerbation and/or alleviation.

Although research indicates that people are aware of their initial psychological reactions to substances and remember these reactions as expectancies, there is little evidence to support substance selection based on a specific diagnosis or internal state. Convincing evidence for the self-medication hypothesis that has yet to be provided requires a combination of: (a) self-report studies in which clients describe particular substances alleviating specific symptoms of mental illness, (b) epidemiologic studies showing that clients with particular diagnoses select specific substances, and (c) studies showing that specific substances are used in response to specific symptoms of mental illness.
The current evidence does not support any of these relationships. However in self-report studies, dual diagnosis clients tend to report that alcohol and other substances alleviate social problems, insomnia, depression, and a variety of other conditions across diagnoses, but they rarely report that specific substances are used to alleviate specific symptoms of a particular mental health condition. Additionally, studies in the area of clinical epidemiology do not support specific substance selection (Mueser et al., 1998).

Another possible explanation is the alleviation of dysphoria, which also sits under the umbrella of secondary substance use disorder models and is more general than the self-medication hypothesis. It is argued that in the alleviation of dysphoria people with substance use disorder initially used substances to either feel good or to alleviate feeling bad. The literature on self-reported reasons for use and on expectancies supports the idea that many different types of dysphoria motivate initial alcohol and other drug use (Mueser et al., 1998; Pettersen, Ruud, Ravndal, and Landheim, 2013). The alleviation of dysphoria theory relies on self-reports and lacks longitudinal research. This is similar to the limitation to the self-medication literature as it lacks prospective longitudinal assessments of dual diagnosis clients. Multiple regular assessments overtime of substance use, psychiatric symptoms, affect, and other potential psychosocial risk factors and consequences in dual diagnosis clients would provide much richer data for evaluating other models explaining the aetiology of comorbidity (Mueser et al., 1998). Further, given the high rate of substance abuse seen in individuals with PTSD, clinicians should consider screening for self-medication or alleviation of symptoms among clients with post traumatic symptomatology (Leeies et al., 2010).
There were a number of exploratory aims in the current study that involved both qualitative and quantitative analysis. It was hypothesised that participants who had experienced developmental trauma would claim to use substances to self-medicate their post traumatic symptomatology. The quantitative analysis indicated that these participants would claim to self-medicate regardless of developmental trauma histories. This finding was also consistent with the qualitative themes that were derived from the responses to the questions ‘What is the primary function/gain of your (or your clients) substance use’ and ‘Do you feel there is a link between your mental health/well-being and substance use? If so how?’. Overwhelmingly, self-medication, described as using alcohol and/or other drugs for the purpose of blocking thoughts, emotions and physical pain, was noted by both participants and treating clinicians. Further participants claimed to use alcohol and other drugs to: (1) manage mental health symptoms/conditions and (2) as a coping strategy to manage life stressors, difficult emotions, thoughts and memories. It is possible that the participants interpreted self-medication more broadly and did not necessarily equate it to their experience of developmental trauma. Additionally, 32 percent of the participants were, at the time, on mental health or substance use pharmacotherapies, which may have clouded the results pertaining to self-medication, as these individuals were already receiving some relief from their symptoms. As discussed in the introductory chapters, men are more likely to self-medicate than women and that individuals with at least partial higher education are significantly more likely to self-medicate compared to those with less than a high school education. Given that the majority of participants were male and had completed higher education (18% TAFE, 8% University), it is
possible that these two variables had more influence on self-medicating behaviours than the experience of developmental trauma.

Another exploratory aim was in relation to patterns of alcohol and other drug use. As noted in Chapter 7, 74 percent of the participants were poly substance users with the majority preferring depressants, 58 percent compared to 32 percent who preferred stimulants. Further, as predicted based on the existing literature, alcohol and cannabis had the earliest average onset use at age 14. It was hypothesised that participants who met criteria for either PTSD or CPTSD would report depressant use as their primary substance of choice. It was further hypothesised that those participants who reported depressants as their primary substance would have higher intrusive symptom scores on the PTSD Symptom Scale compared to those who reported stimulants as their primary substance. This was based on previous literature that suggested the need to dampen intrusive and hyperarousal symptomatology evident in both of these conditions (Khoury et al., 2010; Waldrop et al., 2007). Results from the current study did not support these hypotheses, suggesting that the symptom profile could have differed from this sample to other samples investigating PTSD and CPTSD. Alternatively, due to the high rate of polysubstance use within the current sample, it may suggest that participants do not discriminate nor are motivated to choose a particular substance to alleviate specific symptomatology. This is consistent with Avant et al.’s., (2011) assertion that alcohol and other drug use is associated with general avoidance of psychopathological symptoms rather than focused relief of specific symptoms.

It was also hypothesised that participants who report substance use within a 90 day period from the date of assessment would be more likely to engage in
acquisitive offending compared to other offence types. This was based on the literature discussed in Chapter 3 that suggest substance use being directly linked to specific types of offending. The literature considers substance abuse to be a risk factor for offending acquisitively (need to acquire funds to support alcohol and other drug dependence) and violently (disinhibition when substance affected and/or intoxicated). Results from the current study did not support this hypothesis. This finding is despite the type of offending being reported in the current study being consistent with this hypothesis (20% had committed violent offences, 20% had committed drug offences and 14% theft). The lack of support for this hypothesis is likely to be due to the small sample size. Interestingly, the qualitative analysis yielded different results. When participants were asked ‘What is the primary function/gain of your (or your clients) offending’ one of the primary themes that emerged related to the support of drug use and dependency. Based on this narrative, the primary types of offending being reported and previous research about the motivating factors of offending, one would expect a preliminary pattern to emerge. It is possible that these results yielded insignificant not only due to the sample size restrictions but also possibly due to participants engaging in multiple forms of offending, rendering the determination of a clear pattern between substance use and type of offending impossible.

Further, it was hypothesised that those participants with CPTSD would have higher rates of committing violent offences compared to those participants with PTSD alone. This hypothesis was based on existing literature that discusses affect regulation difficulties, in particular anger modulation, evident in individuals with CPTSD. In line with the literature on CPTSD (Hosking & Walsh, 2005), it was hypothesised that violent offenders would endorse more
clinically significant scores on the Alterations in Regulation of Affect and Impulse scale (encompassing self-destructive, excessive risk taking, affect regulation and modulation of anger) on the SIDES-SR compared to other types of offenders. Again, neither of these hypotheses was supported, as results indicated that there was no significant difference between violent and non-violent offenders in the severity of SIDES scores for alterations in regulation of affect and impulses. To account for the differences in the current study’s results and those proposed by the theory and existing literature, the researcher can only attribute these differences to having insufficient power due to the small sample size.

8.3 Reconceptualisation of the Qualitative Results within the Forensic Models (PCC, RNR and GLM).

As reported in Chapter 7 the results, the primary themes that emerged from the qualitative question ‘What life experiences, if any, do you think resulted in your client’s offending and why’, were (1) antisocial modelling (social learning theory), (2) antisocial and/or drug using peers, (3) alcohol and other drug use, (4) relationship and family conflict/breakdown, (5) unstable accommodation and/or employment and (6) poor mental health. While the factors listed above were repeated in response to the qualitative question ‘What life experiences, if any, do you think resulted in your client’s substance use and why’, four additional themes emerged (1) trauma, (2) grief and loss, (3) limited coping skills, and (4) low self-esteem. Of these, according to the PCC, possession of antisocial attitudes and association with antisocial peers are particularly influential in the development and maintenance of criminality. The RNR and GLM models would consider antisocial modelling and trauma exposure to be static risk factors and the remaining dynamic risk factors as they are changeable: antisocial peers, alcohol
and other drug use, relationship conflict, unstable accommodation and/or employment and poor mental health. Further these factors according to the RNR model are criminogenic needs that need to be targeted in treatment in order to reduce recidivism. The GLM would extend upon this conceptualisation and stress that positive relationships, stable accommodation and/or employment and sound mental health would be considered primary goods necessary for an individual’s well-being and fulfilment. Consequently, in not having these primary goods, individuals seek out these goods in inappropriate ways such as offending.

According to Andrews, Bonta and Wormith (2006), the four strongest risk factors for recidivism are an established criminal history, an antisocial personality pattern (stimulation seeking, low self-control, anger), antisocial cognition (i.e., instant gratification, perceiving benign situations as threatening), and antisocial associates. They also identified four moderate risk factors: substance use, employment instability, family problems and low engagement in prosocial leisure pursuits. Many of these risk factors apply to offenders with mental health issues as mental illness is often independent of criminal behaviour or is indirectly responsible for criminal behaviour by promoting the development of general risk factors. Individuals with mental illness are disproportionally represented in the criminal justice system and are disproportionally likely to fail under correctional supervision compared to non-mentally ill probationers and parolees (Skeem et al., 2010). Evidence based mental health services have not been found to affect criminal justice outcomes despite symptom improvement. While some programs do reduce recidivism, there is no evidence that this is due to providing offenders with psychiatric treatment or by achieving symptom reduction (Skeem et al., 2010). While offenders with serious mental health need psychiatric care, the
management of these disorders may do little to reduce their risk of recidivism. Untreated mental health has only been established as a weak predictor of recidivism in a small number of offenders (Skeem, Winter, Kennealy, Louden, & Tatar II, 2014).

The aetiology of criminal behaviour largely remains the same regardless of whether or not the offender suffers from mental illness. Andrews et al. (2006) posit that “the predictive validity of mental disorders (for criminal justice involvement) most likely reflects antisocial cognition, antisocial personality pattern, and substance” (p. 10). According to Skeem et al. (2010), it is possible that there is an additional variable, adverse social environment that increases exposure to modelling and reinforcement patterns that program antisocial behaviour. There is some research that indicates that the risk of violence is elevated for people with mental illness; however, this risk is elevated further when those individuals abuse alcohol and other drugs. It is important to note that most mentally ill people are not violent and violent offenders are typically not mentally ill. Therefore, there is little evidence to suggest that recidivism is due to the mismanagement of mental health symptoms (Skeem et al., 2010).

Skeem et al. (2014) conducted a study where 221 parolees with and without mental illness were monitored for a year to track recidivism. They found that mentally ill offenders have more general risk factors for recidivism than non-mentally ill offenders. These risk factors included: an antisocial personality pattern, antisocial attitudes, education and employment instability, and family problems. Further, general risk factors were found to predict recidivism more than unique variables, regardless of whether or not participants had mental health issues. Specifically, risk factors such as poorly structured leisure and recreation
time significantly predicted re-arrest and return to custody, whereas variables unique to mental illness, such as medication compliance did not. Participants with mental health issues were also more likely to return to custody than those without mental illness, even though they were no more likely to be re-arrested. Overall, mentally ill participants were found to have earlier and diverse criminal behaviours, a generalised pattern of trouble and prosocial attitudes. For these individuals, antisocial peers and substance use were predictors of recidivism, however these results cannot be considered causative and explanatory. Skeem et al.’s findings suggest that the relationship between mental illness and recidivism, is largely indirect. Therefore general risk factors for recidivism need to be targeted and treatment adapted to cater for mentally ill offenders. This recommendation does not suggest that mentally ill offenders should not be provided with psychiatric care, nor does it ignore the benefits of such care such as promoting better health outcomes. It does, however propose that psychiatric care can act synergistically with offence specific treatment. A possible benefit from this type of care is that managing symptoms and improving mentally ill offenders functioning may result in a reduction in violation of community based dispositions (Skeem et al., 2014).

According to Skeem et al. (2014), if general risk factors are responsible for criminal behaviour more often than mental illness, then the framework in which we manage mentally ill offenders needs to be revised. The ‘what works’ research has consistently demonstrated that the effectiveness of forensic treatment programs is based on the number of criminogenic risk factors that are targeted. In accordance with RNR principles, the most effective programs for reducing recidivism are those that target criminogenic needs. As mental illness has not
been established as a criminogenic need for the majority of mentally ill offenders, it is more important to target stronger risk factors in treatment. In order to be responsive, forensic treatment programs need to be matched to the abilities, styles and needs of the offenders. Therefore effective psychiatric treatment may complement offence specific treatment managing symptoms to enable offenders to attend to and benefit from criminogenic treatment targeting. The aim of psychiatric treatment would be to reduce recidivism for the small subgroup of offenders whose mental illness is directly related to their offending behaviour. On the whole, psychiatric treatment is unlikely to reduce recidivism as the effect of mental illness is fully mediated by general risk factors. Skeem et al. (2010) suggest that some treatment programs for offenders with mental illness are effective in reducing recidivism but these are not for the reasons initially assumed. They suggest that an important goal for future research would be to identify the mechanisms that reduce recidivism within these programs. Understanding what is crucial to treatment and how it operates, will help develop interventions that are fewer, more efficient, and more effective in respect of offenders with mental illness. Future research needs to focus on how psychiatric treatment adds value to risk reduction in mentally ill offenders (Skeem et al., 2014).

As presented in Chapter 8 in the results section, the following themes emerged in response to the qualitative question ‘If you could change or improve one area of your functioning or circumstances what would it be and why’ emerged: (1) improved physical health and fitness, (2) employment and financial security, (3) improved relationships, (4) improved mental health, (5) abstinence from alcohol and other drugs. These factors fit nicely into a number of primary
human goods classes as defined by the GLM. Physical health and fitness would fit under the first primary good *life* that includes healthy living and optimal physical functioning. Employment and financial security could fit under the primary goods *excellence* in play and work and *excellence* in agency referring to autonomy and self-directedness. Improved relationships could fit under the primary good *relatedness* including intimate, romantic and family relationships. Mental health and abstinence from alcohol and other drugs would likely sit under the primary good *inner peace* including freedom from emotional turmoil and stress. As mentioned in the introductory chapters, the absence of primary goods has been found to be directly linked to various psychological problems (Whitehead et al., 2007). It is therefore possible that the psychopathology present in the current study’s participants could be explained by the absence of these primary goods, rather than the experience of trauma alone.

While, the experience of trauma was one of the themes attributed to the development of alcohol and other drug using behaviours, the participants did not directly link trauma to offending. If one considers the participants’ narrative and the available forensic literature (Andrews & Bonta, 2010), it is possible to propose a trajectory from developmental trauma through to substance use and subsequent offending. The experience of developmental trauma, a static risk factor, results in an individual being vulnerable to using alcohol and other drugs, a dynamic risk factor, in order to self-medicate or escape painful thoughts, emotions and bodily sensations. Using alcohol and/or other drugs regardless of whether dependence ensues is a criminogenic risk and need as it is directly linked to offending behaviours. Often when an individual is using alcohol and other drugs they are unable to fulfil their primary goods. Ascertaining whether
psychopathology developed as a result of the trauma, alcohol and other drug use or being unable to attain primary goods or a combination of these is a difficult task. What the evidence is suggesting however is that integrated treatment such as the Seeking Safety program is effective in reducing post traumatic symptomatology, alcohol and other drug use and recidivism (Hien, 2009; Zlotnick et al., 2009). These results suggest an underlying relationship between these constructs regardless of causality. Integrated programs at least on the surface appear to take into account both criminogenic and non-criminogenic needs and are responsive to individuals.

Responsivity issues that have been previously discussed in accordance to the RNR model include gender and emotional regulation deficits. While these factors are non-criminogenic, there is recognition that these need to be taken into account when tailoring treatment due to their potential of hindering focused offence specific (criminogenic) intervention. According to Taxman and Marlowe (2006) treatment providers often disregard the information collected at assessment, such as trauma history, and many of the correctional treatment programs available to offenders ignore need and responsivity issues that would require treatment to be individually tailored to the offender. In practice, it appears as through within forensic arenas there is a focus on the risk component of the RNR model with little regard to need and responsivity due to limited access to resources to effectively manage and treat these offenders (Polaschek, 2012). Effective treatment in accordance to the RNR and GLM would require comprehensive assessment and investment in responsivity factors.
8.4 Limitations of the Clinical and Research Utility of the SIDES-SR and the mPSS

In recent times, researchers and clinicians have agreed that the PTSD diagnostic criterion fails to sufficiently capture the constellation of symptoms that result from chronic developmental trauma (Collings, 2013). There are a number of studies that have provided evidence of the convergent and discriminant validity of the SIDES-SR (Pelcovitz et al., 1997; Roth et al., 1997; Van der Kolk et al., 2005; Zlotnick & Pearlstein, 1997). However, subsequent studies have not supported the six factor structure of the SIDES-SR. Scoboria, Ford, Lin, and Frisman (2008) identified a five factor model that consisted: demoralisation, somatic dysregulation, anger dysregulation, risk/self-harm and altered sexuality. This model was deemed a good fit in confirmatory factor analysis conducted among incarcerated adults (n=447). The authors reported that the revised scale had low to high internal consistency (Cronbach’s a: full scale =.87, subscales =.64 to .84), adequate concurrent, convergent and divergent validity. Collings (2013) conducted a series of discriminant analyses on the SIDES-SR and found that 12 of the 45 items equating to 27 percent, did not significantly discriminate individuals who had been exposed to complex developmental trauma from those who had not. Additionally, once these items were removed, there was no significant impact on the SIDES-SR concurrent validity, sensitivity or specificity. In particular, all four items that related to avoidant sexual behaviour failed to discriminate groups defined by the presence or absence of a developmental trauma history. Scoboria et al. suggested some psychometric weaknesses in the SIDES. They empirically examined the factor structure of the SIDES in
incarcerated and alcohol and other treatment participants and found a five-factor model was a better fit for the data (Lee, 2012).

There are also a proportion of violent offenders that develop PTSD in response to their own actions. Steiner, Garcia and Mathews (1997) found that 5 percent of juvenile offenders with trauma histories report PTSD symptoms related to their use of violence towards others. Spitzer et al. (2001) found that 20 percent of forensic inpatients with PTSD had been traumatised by their commission of violence. Interestingly in Spitzer et al.’s study, all of the patients who had committed murder had consequently developed PTSD in relation to their offence. Further Evan’s et al. (2007) found that 46 percent of juvenile violent offenders reported experiencing intrusive memories of their offending, with 5.7 percent meeting diagnostic criteria for PTSD in relation to their crime. Dissociation often occurs when extreme affect dysregulation and disorganised attachment make self-regulatory processes insufficient to restore bodily integrity. Dissociation can be considered a defensive attempt for the individual to prevent further psychobiological disintegration (Dell & O’Neil, 2009). When a person dissociates, the integrated functioning of self-preservation and self-regulation is abandoned in the interest of bodily integrity. In essence, the dissociative split separates the preconscious modes of self-preservation from the conscious mode of self-regulation. This subjugation during psychological development is likely to prevent the attainment of consistent, integrated, and personified self and rational representations that are necessary to respond to subsequent stressors. This places a potentially severe strain on a person’s biological and relational resources (Dell & O’Neil, 2009). It is therefore possible that the SIDES-SR is capturing
dissociative experiences that are not directly linked to the experience of developmental trauma.

The SIDES measures dissociation with five items looking at three aspects of dissociation: (1) total amnesia for important past experiences, (2) depersonalisation and (3) derealisation. However, the amnesia and derealisation items may not necessarily involve the fragmentation of representations self and other, whereas, depersonalisation involves having separate parts of oneself taking control or competing. Ford (2011) argues that the endorsement of dissociation items on the SIDES may reflect problems with attention, orientation and motivation rather than actual dissociation. According to the author, true dissociation only occurs if there is a loss or fragmentation of representations of self and others that is caused by impaired attachment, affect regulation and information processing typically seen in developmental trauma where the abuse has been perpetrated by the primary caregiver. Consequently, the SIDES may not be measuring dissociation in its entirety and when dissociation may be suspected it would be worth considering utilising another psychometric to assess for dissociation. Studies of dissociative symptoms have primarily used two instruments, the DES and the Structured Interview for DSM-IV Dissociative Disorders (SCID-D; Steinberg, 1994).

While the dissociation subscale on the SIDES showed fair internal consistency in the DSM-IV field trial, it also shared between 20 to 33 percent variance with each of the other subscales. This was compared to the other subscales that only shared between five to ten percent of variance. Subsequent studies involving different samples (men and women in alcohol and other drug treatment (N = 236), community mental health treatment for chronic mental
illness (N = 52), incarcerated offenders (N = 301), homeless families (N = 163) have found poor internal consistency with the dissociation subscale (Alpha = 0.27-0.35 and low inter-item correlations $r = 0.08-0.33$). These results may indicate that the SIDES dissociation subscale is ill-suited to complex clients who have experienced chronic or a multitude of psychosocial adversities. Ford (2011) conducted a series of exploratory principal components factor analyses with varimax rotations on the above studies. Variables producing anti-image correlations below 0.5 were removed and variables that loaded above 0.45 on factors were retained. Of particular note were the results from the alcohol and other drug treatment and incarcerated offender samples. In the alcohol and other drug treatment sample, a five factor solution was obtained that accounted for 42 percent of the common variance: affect dysregulation (12% variance, Alpha = 0.71), somatisation (10% variance, Alpha = 0.72), self-harm (8.5% variance, Alpha = 0.66), damage/despair (7.5% variance, Alpha = 0.66), sexual violation (5.5% variance, Alpha = 0.67. Within this sample the dissociation items did not load onto any factor. In the incarcerated offenders sample a five-factor solution accounted for 50 percent and 47 percent of the common variance in lifetime and current DESNOS symptoms respectively. The largest factor in each analysis reflected affect dysregulation (13%-17% variance), followed by impulsive aggression/self-harm, externalised anger, somatisation, and sexual violation. The author found that amnesia did not load on any factor and that depersonalisation and derealisation only moderately loaded on affect dysregulation. Structural equation modelling was used to test the fit of three different models within this sample: (1) SIDES as is, (2) the SIDES structure minus the items that did not
contribute to the five-factor solution, and (3) the five-factor structure obtained from the alcohol and other drug treatment sample. Results suggested that both the SIDES models fitted the data poorly, however, the five-factor structure from the alcohol and other drug treatment sample was found to be a good fit with the data. These findings suggest problems with the structure of DESNOS and question the role of dissociation in Complex PTSD.

According to Weiss (2012), the development of a precise descriptive definition of complex PTSD and more precise validated instruments is needed. Further, these measures need to capture the person’s full victimisation profile rather than a single traumatic event. This conceptualisation fails to acknowledge the fact that different forms of developmental trauma tend to cluster together with many survivors experiencing multiple forms of developmental trauma chronically. This type of exposure has been found to be strongly predictive of both complexity and chronicity of post traumatic symptomology (Collings, 2013). Further, it fails to recognise the compounding effects of adult trauma experiences on post traumatic symptomatology.

8.5 The Limitations of the Study

The identification of developmental trauma in the current study was based solely on individuals’ retrospective interpretations of events. Such retrospective self-reports can be affected by a number of factors including social desirability, memory limitations and mood state at the time of recall. There was no measure of social desirability included in the current study, therefore it cannot be determined if the estimates of childhood trauma are underestimates or overestimates. The denial and minimisation results found on the CTQ do suggest some level of
underestimation of developmental trauma exposure in the current study. The impact of normal memory limitations and participants’ mood states on the findings are also unknown. Brewin, Andrews, and Gotlib (1993) reviewed the impact of these factors on retrospective reports and concluded that usual memory limitations and participants’ mood states do not necessarily impact on the recall of childhood experiences. These authors also suggested that the negative effects of normal memory limitations and current mood state on retrospective recall might be reduced when participants are questioned about well-defined experiences. It could be argued that the CTQ does just that (Scher et al., 2004). Self-report measures, whilst frequently used in trauma studies may be limited due to report biases. When dealing with clinical diagnoses, it should be noted that there might be differences between the rates derived from clinical diagnosis and self-reports (Zerach & Solomon, 2013).

The current study was a cross-sectional design. It examined individuals at a single point in time, thereby negating determination of the order of onset of PTSD, self-medication, and substance use behaviours. Therefore the true nature of the interplay between self-medication, PTSD, and SUD could not be established. The findings must be tempered by the lack of specificity with respect to the use of self-medication in specific traumatic events. Individuals may be exposed to a host of stimuli or situations that could be defined as traumatic, but the study did not specify whether participants’ self-medication behaviours were in response to the stressor that caused PTSD (Leeies et al., 2010). Additionally, while the study explored the participants’ developmental trauma experiences, it failed to enquire about adult experiences of trauma. According to Lee (2012) interpersonal violence that is experienced in adulthood can contribute an
additional 17 percent of variance on DESNOS symptom severity as measured on the SIDES-SR. Given the high rate of these participants experiencing multiple developmental traumas as well as a high likelihood based on the literature of them being re-traumatised in adulthood, the researchers were unable to discriminate which traumatic event(s) were linked to their experience of post traumatic symptomatology. Further, the study originally aimed to have a control group to measure CPTSD symptoms in those participants that had not reported a developmental trauma history; however, insufficient cases led to the exclusion of that data from the analyses. Consequently, the research did not include a control group, which would provide information on the presence of DESNOS in the general population and substance users without PTSD (Nemčić-Moro et al, 2011).

Further limitations relate to the study’s generalisability due to the sample size and underrepresentation of women. Therefore the results are unable to be generalised and previous research noted in the introductory chapters on trauma incidence and gender differences accepted. Additionally the author only had access to the participants self-reported index offence, rather than comprehensive criminal history reports. This is problematic as there is no indication that the participants index offence is indicative of the type of offender he/she is generally. The participants were categorised as either acquisitive or violent offenders, when in actuality they might be both based on their offending histories.

8.6 The Difficulties with Achieving Integrated Treatment for Dual Diagnosis

The presence of PTSD has been found to consistently be associated with poor alcohol and other drug treatment outcomes. The neurological changes that have been evident in individuals with PTSD and histories of developmental
trauma, such as cue-induced automatic responses, also occur in individuals with SUD. This may result in avoidance or impulsive behaviours such as alcohol and other drug use (Benton, Deering & Adamson, 2012). Ouimette, Moos, and Finney (2003) reported that clients who receive treatment for their PTSD symptoms are more likely to remain abstinent at a five year follow up. They hypothesised that an early treatment course for PTSD and SUD provides the necessary skills to interrupt the feedback loop of both disorders (Weis, 2010). Gil-Rivas et al. (2009) found that individuals with comorbid conditions reported the experience of depressive and anxiety symptoms prior to relapse. Perversely these individuals also reported that these symptoms did not diminish and were exacerbated post drug use (Jason et al., 2011). One of the crucial components of responding to comorbidity should be prevention. For example, if services can identify individuals suffering from anxiety and affective disorders, interventions can be tailored to reduce individual’s risk of developing substance use disorders. Such interventions are likely to reduce the prevalence and life course of substance use disorders while also reducing the impact of anxiety and affective disorders (Teesson, et al., 2009).

There are a number of barriers to routinely integrated screening, assessment and treatment; however the Victorian Dual Diagnoses Initiative has made a number of suggestions for possible strategies to overcome these. It is critical to enact these strategies to provide the appropriate level of service provision to offenders with dual diagnoses in order to enhance well-being with the ultimate goal of reducing recidivism. There may be a lack of awareness of the prevalence and harms associated with comorbid disorders, their likely interactions and subsequent treatment implications. The possible strategies proposed by the
initiative to address this barrier include providing this information in multiple formats and building the agency’s capacity to record screening data for dual diagnosis. There may be a perception held by clinicians that this will add to their work load, especially when they feel overwhelmed by multiple demands, stressors and administrative tasks. The initiative suggest promoting the idea that recognising and addressing comorbid disorders is more likely to result in successful treatment. From a management perspective, when introducing a new screening or assessment form, it is better to simplify the process and alleviate the existing administrative demands. There may be a lack of familiarity with using screening tools, which could lead to difficulty integrating these into routine practice. Further, clinicians may hold concerns regarding the client’s engagement being compromised by formal screening for a disorder that they did not initially present to the service for. Both of these concerns could be alleviated by providing information about the rationale for screening and assessment, providing training, modelling and clinical supervision to assist with the integration into routine practice and by including careful explanations to clients of the rationale for screening as well as reiterating confidentiality and it limits (Croton, 2007). As discussed in Chapter 5, the utilisation of the mPSS or the IES-R at the commencement of treatment and throughout treatment would enable clinicians to quickly and routinely assess PTSD symptoms and treatment progress.

Clinicians may lack skills, knowledge and confidence in their ability to provide appropriate treatment for a co-occurring disorder that may result in a reluctance to ask questions which could lead to its identification. The initiative suggested two strategies to combat these concerns. The first involves providing education, training and realistic optimism about the effectiveness of treatment,
and the second requires managers to address clinician’s self-efficacy in providing such treatment. There may be a lack of clarity about their scope of practice. To address this it is important to explicitly clarify clinicians’ scope of practice via the use of guidelines and treatment manuals and to promote tools that contain integrated risk assessments. This shift in direction may lead to questions surrounding clinicians’ current practice and an assumption that this is “wrong.” It’s important to reframe the development of integrated screening, assessment and treatment as a progressive step towards more effective treatment. There may be concerns regarding the changes to practice, language, beliefs, values and exclusion criteria. The initiative suggests utilising policy to reinforce dual diagnosis treatment as core business for both mental health and alcohol and other drug treatment agencies (Croton, 2007).

There may also be concerns regarding stigmatisation of clients and/or clinicians’ cognitive dissonance relating to their own history of substance or mental health. According to the initiative, it’s important to encourage treatment providers to identify their own attitudes and feelings that are evoked when dealing with particular disorders and to provide integrated treatment orientated clinical supervision. The last potential barrier relates to the possibility that clinicians may have a lack of knowledge of the ‘opposite’ treatment system, including its strengths, differences and constraints. There are a number of strategies suggested by the initiative that provide opportunities for understanding and maximising informal and formal contacts between providers. These include: rotations and placements with the opposite service, joint training, routine provision of service from the opposite agency, worker-developed protocols,
location and scheduled, regular interagency management and clinical meetings (Croton, 2007).

As discussed in the introductory chapters, offenders have additional complexities that need to be considered when tailoring assessment and treatment for dual diagnoses. Complicating matters further are those offenders who appear in prisons and therapeutic communities as these environments can hinder treatment and provoke post traumatic symptomatology. Although Miller and Najavitis (2012) recommend trauma informed correctional care, rarely is an approach such as this consistently utilised and/or recognised as needed within the forensic arenas. At the very least, treatment providers need to consider developing practices within correctional settings that focus on the safety of prisoners and staff when targeting trauma in treatment. Ideally, treatment providers within corrections would acknowledge the need for trauma informed care and provide this routinely to offenders with the intention of reducing recidivism. Clinicians also need to be aware of the trust issues these individuals possess and invest far more time developing the therapeutic alliance prior to engaging trauma intervention.

In the development of therapeutic alliance, emotions such as shame and guilt and anxiety and fear associated with relationships are centrally important. Dorahy et al. (2015) investigated the psychopathology and various markers of self in relationships in participants with a history of child abuse and/or neglect. The participants were categorised into three diagnostic groups, dissociative disorder, chronic PTSD or mixed psychiatric presentations (primarily mood and anxiety disorders). They found that compared to the mixed presentation group, the dissociative disordered group had more shame and guilt and were more likely to...
withdraw when shame was activated. In addition, these individuals had more complex PTSD symptoms, with and without dissociation, reported more relationship anxiety and depression, had a fear of relationships and more severe exposure to developmental trauma. These participants also reported a tendency to attack others in response to shame activation. An addition it was found that CPTSD symptoms predicted fear of relationships.

Trauma interventions should be based on best practice programs such as the integrated SUD and PTSD treatments (i.e., Seeking Safety, TARGET, ALTRIUM) that have demonstrated effectiveness in reducing substance use and alleviating post traumatic symptomatology. While there is a paucity of research specific to offenders’ coping styles, it has been suggested that due to the treatment non-completion rates of these offenders, clinicians need to explore the offenders coping. For example, offenders who have avoidant coping styles may benefit from interventions that reduce their anxiety by teaching them stress management techniques (Claes et al., 2014). Prior to offence specific interventions, offenders should be encouraged to engage in distress tolerance intervention such as Skills for Improving Distress Intolerance to reduce the likelihood of non-completion (Tull et al., 2013). Similarly, offenders with more avoidant coping styles would likely benefit from engaging in interventions that diminish their anxiety levels and enhance their capacity for stress management (Claes et al., 2014). Treatment providers who focus on building the therapeutic alliance, managing offenders’ distress and skill training on improving distress tolerance will likely see better treatment outcomes and subsequent reductions in reoffending.
8.7 Directions for Future Research

Despite recent advances in understanding the relationship between cumulative, interpersonal traumas and the range of symptoms and severity, researchers continue to assert the need for further exploration. Additional empirical study would benefit from being focused on the combined effects of different types of interpersonal traumas on symptom patterns and functional outcomes. Future research may benefit from exploring the severity and frequency of abuse, age of first occurrence, and perpetrator identity (Khoury et al., 2010).

Further, whilst previous research has highlighted the role of attachment in relation to complex trauma, more collaboration between attachment researchers and trauma experts is needed. According to Kisiel et al. (2014), this is essential “given disrupted attachment and trauma exposure may have similar negative outcomes and the two combined may have even worse effects on children’s development and functioning” (p. 2). Future research needs to focus on continuing to assess the relationship between complex, interpersonal trauma exposure and symptoms/impairments using prospective and retrospective, cross-sectional and longitudinal studies (Kisiel et al., 2014).

Another area of importance is the differential impact of certain types of trauma on symptoms and developmental processes and how these symptom patterns may evolve across time (Kisiel et al., 2014). While associations between mental disorders have been discussed, no conclusions in relation to causality can be made. However, discerning the possible causes is crucial to developing effective responses (Teesson et al., 2009). Efforts to subtype dual diagnosis may be useful both for understanding the different aetiologies of the high rate of comorbidity and developing interventions to meet the needs of more
homogeneous subgroups of clients (Mueser et al., 1998). Large scale epidemiological follow-up studies are needed to explore the casual relationships in comorbidity and should be a priority for future research and direction (Teesson et al., 2009).


DEVELOPMENTAL TRAUMA IN SUBSTANCE USING OFFENDERS


Centre for Addiction and Mental Health. (2003). Diagnosing and identifying the need for trauma treatment: A guide for mental health professionals working with women. from


Ford, J. D. (2013). How Can Self-Regulation Enhance Our Understanding of


Herman, J. L. (1994). *Trauma and recovery.* London: Pandora.


use comorbidity (pp. 73-88). Washington, DC: American Psychological Association.


disorder. *Journal of Traumatic Stress, 10*(4), 539–555. doi:
10.1002/jts.2490100403


Appendices

Appendix A: Plain Language Statement for Participants

PLAIN LANGUAGE STATEMENT AND CONSENT FORM

TO: Participants

Date: 16/12/2011

Full Project Title: Exploring the Complex Needs of Substance Using Offenders

Principal Researcher: Dr Tess Knight

Student Researcher: Suzanne Vidler (Candidate, Doctor of Psychology (Forensic))

Your Consent
You are invited to take part in this research project.

This Plain Language Statement contains detailed information about the research project. Its purpose is to explain all that is involved in this project as openly and clearly as possible so you can make an informed decision about whether to participate.

Please read this Plain Language Statement carefully. Feel free to ask questions about any information in the document. You may also wish to discuss the project with a relative or friend or your local health worker. Feel free to do this.

If you choose to participate please sign below and provide a contact number that the researcher can contact you on to arrange a time to participate.

Purpose and Background
The purpose of this project is to examine the relationships between different types of childhood experiences, substance use and offending behaviours. The project is being conducted by one student who is undertaking the Doctor of Psychology (Forensic) under the supervision of Dr Tess Knight. It is proposed that approximately 130 people will participate in this project.

Plain Language Statement & Consent Form to Participants
Procedures
Participation in this study is completely voluntary and confidential. If you choose to participate please sign the consent form and provide a contact number that the researcher can reach you on. Once the consent form is signed, ask the reception to place it in the in-tray provided. The researcher will then contact you to arrange a time to complete a questionnaire during your engagement with the service provider (Moreland Hall or Caraniche). If you are a client of Moreland Hall, it is likely that you will be asked to participate in a group session with other participants that have consented to be a part of the research. If you are a client of Caraniche, the questionnaire is likely to be completed in an individual session with the researcher; however you may also be asked to join a group session if there are a number of participants consenting to participate. Group sessions will involve no more than 10 participants at any given time. If you have concerns relating to participating in a group, please inform the researcher so that an individual session can be arranged instead.

The questionnaire will include four main parts. The first will ask for a few details about you, such as your age, gender, substance use and offending history. The second will ask you about some of your experiences growing up. The third will ask you some questions about how you have reacted to certain experiences in your life. Finally, the fourth will provide descriptions of typical reactions someone could have after an experience and ask you to indicate if you have had similar feelings.

The survey should not take you longer than 60 minutes to complete. After you submit the answers to the survey, they will be added to a pool of data, which will be analysed by the researchers. It will not be possible for the researchers to separate your answers from the rest; therefore they will not be able to tell what you answered to each question.

Please note that if you provide consent, the researcher will also have access to the information you provided in the assessment interview. This information includes, demographic information, such as your age, gender etc., your alcohol and other drug history, mental health history, criminal history, health history and information regarding your relationships and family. Further, your treating clinician will be asked to answer a few questions about you regarding their thoughts about the function of your substance use and offending behaviour.

Plain Language Statement & Consent Form to Participants
Possible Benefits
You will receive little direct benefit from this project, although we hope you find participation interesting. You will however, receive a $10 (Coles/Myer) gift voucher for your time and effort. Your participation may help the researchers gain knowledge about the processes and relationships between childhood experiences, substance use and offending.

Possible Risks
Due to the sensitive nature of the material and questions included, you may experience some uneasiness or discomfort while completing the questionnaires. However, the researchers will be present and support will be provided if any discomfort is experienced.

You are under no obligation to participate in the study. You can also withdraw from the study at any time before your answers to the questionnaires are submitted. There will be no adverse consequences if you do decide to withdraw from the study.

However, once your survey is submitted, it will be impossible for the researchers to withdraw your responses, as there will be no way for them to separate your responses from everybody else’s.

You can contact the researcher if you have any questions, comments or concerns about the survey you have completed.

Privacy, Confidentiality and Disclosure of Information
Any information obtained in connection with this project will remain confidential. This includes correctional services not being aware of your involvement in the research regardless of whether you consent to participate or choose not to participate. The data obtained in connection with this project will be stored electronically for six years. Data storage will be secured by use of password protection. Once your answers are submitted, we will be unable to delete your data as we will not know which data were submitted by you. The collective data may be presented in written reports or at conferences but no individuals will be identified.

Results of Project
If you wish to receive a summary of the report at the completion of the project you are welcome to contact the primary researcher Suzanne Vidler.
Participation is Voluntary
Participation in any research project is voluntary. If you do not wish to take part you are not obliged to. Your decision whether to take part or not will not affect your relationship with your treating counsellor at Moreland Hall or Caraniche.

Once you have completed the questionnaires and submitted your data the researchers will not be able to remove your answers as you cannot be identified. If you decide to withdraw before your questionnaires are submitted, you can simply inform your counselling that you no longer wish to participate.

Ethical Guidelines
This project will be carried out according to the National Statement on Ethical Conduct in Human Research (2007) produced by the National Health and Medical Research Council of Australia. This statement has been developed to protect the interests of people who agree to participate in human research studies.

The ethics aspects of this research project have been approved by the Human Research Ethics Committee of Deakin University.

Complaints
If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:

The Manager, Research Integrity, Deakin University, 221 Burwood Highway, Burwood Victoria 3125, Telephone: 9251 7129, Facsimile: 9244 6581; research-ethics@deakin.edu.au

Please quote project number (2012-002)
Further Information, Queries or Any Problems
If you require further information, wish to withdraw your participation or if you have any problems concerning this project (for example, any side effects), you can contact the principal researcher:

Suzanne Vidler

School of Psychology
Deakin University
Email: svidler@deakin.edu.au
PLAIN LANGUAGE STATEMENT AND CONSENT FORM

TO: Participants

Consent Form

Date: 16/12/2011

Full Project Title: Exploring the Complex Needs of Substance Using Offenders

Reference Number: (2012-002)

I have read, or have had read to me in my first language and I understand the attached Plain Language Statement.

I freely agree to participate in this project according to the conditions in the Plain Language Statement.

I have been given a copy of the Plain Language Statement and Consent Form to keep.

The researcher has agreed not to reveal my identity and personal details, including where information about this project is published, or presented in any public form.

Participant’s Name (printed) .................................................................

Signature ................................................................................ Date .........................

Please indicate if there is a preferred time to contacted..........................

and the best contact number for the researchers to call..............................
PLAIN LANGUAGE STATEMENT AND CONSENT FORM

TO: Participants

Revocation of Consent Form

(To be used for participants who wish to withdraw from the project)

Date: 16/12/11

Full Project Title: Exploring the Complex Needs of Substance Using Offenders

Reference Number: (2012-002)

I hereby wish to WITHDRAW my consent to participate in the above research project and understand that such withdrawal WILL NOT jeopardise my relationship with Deakin University and Moreland Hall.

Participant’s Name (printed) ..............................................................

Signature ................................................................. Date .................

Please mail or fax this form to:

Suzanne Vidler DPsych (Forensic) Candidate
School of Psychology, Deakin University.
221 Burwood Highway
Burwood, VIC
3125

Phone: 0401386058
Fax: 03 92446858
E-mail: svidler@deakin.edu.au

Plain Language Statement & Consent Form to Participants
Appendix B: Plain Language Statements for Clinicians

PLAIN LANGUAGE STATEMENT AND CONSENT FORM

TO: Clinicians

Date: 16/12/2011

Full Project Title: Exploring the Role and Patterns of Developmental Trauma in Substance Using Offenders

Principal Researcher: Dr Tess Knight

Student Researcher: Suzanne Vidler (Candidate, Doctor of Psychology (Forensic))

Your Consent
You are invited to take part in this research project.

This Plain Language Statement contains detailed information about the research project. Its purpose is to explain all that is involved in this project as openly and clearly as possible so you can make an informed decision about whether to participate.

If you choose to participate, please sign the consent form below. By doing so, it will be assumed that you consent to participate in the research for the duration of the project. Please note however that you can choose to withdraw your consent at any given time.

Please read this Plain Language Statement carefully. Feel free to ask questions about any information in the document.

Purpose and Background
The purpose of this project is to examine the relationships between different types of childhood experiences, substance use and offending behaviours. The research project aims to explore the incidence of childhood trauma and the

Plain Language Statement & Consent Form to Clinicians
incidence and patterns of trauma symptoms in offenders. In particular, it aims to underline the over representation of childhood trauma and substance use in offenders by collection of data provided from the questionnaires and interviews with offenders. The study also aims to identify whether the type of childhood trauma a person has experienced influences both substance use behaviours and offending behaviours. The study hopes to identify particular needs that people with childhood trauma histories face and to hopefully improve the sector’s ability to better understand and provide appropriate assistance and treatment. The project is being conducted by one student who is undertaking the Doctor of Psychology (Forensic) under the supervision of Dr Tess Knight. It is proposed that approximately 130 people will participate in this project.

**Procedures**

The study involves acquiring data from both clients of the service and their treating clinicians. During the agencies normal assessment protocols, forensic clients would be screened for the presence of developmental trauma via the *Childhood Trauma Questionnaire (CTQ)*, a retrospective self-report that asks participants about some of their experiences growing up as a child and a teenager. This initial screen would take approximately 5 minutes for clinicians to administer. Other information that would be required at this stage includes the client’s age, gender, substance use history and offending history. All of this information is currently being captured within your assessment tool, so would not require additional time and effort. If screened as appropriate, clients would be provided the plain language statement and asked to consent to participate in the research.

If consent is provided, the researcher will contact the participants to arrange a time either individually or within a group to complete the questionnaire, which has three sections. The first will ask the client some questions about how they have reacted to certain experiences in their life via the use of the *Modified PTSD Symptom Scale*. The second will provide descriptions of typical reactions someone could have after a traumatic experience and ask clients to indicate if they have had similar feelings. This part utilises the *Self-Report Instrument for Disorders of Extreme Stress (SIDES-SR)*. The final part would ask clients to answer a few open ended questions about how they see the connection between their developmental trauma, substance use and offending behaviours.

An important part of the research involves comparing client attributions of the relationship between developmental trauma, substance use and offending with
those of their treating clinicians. Therefore your participation is requested
whereby the participants treating clinicians would be asked to complete a
similar questionnaire in relation to that particular client, all of which would be
de-identified. These questions are based on the clinicians’ opinion about the
link between substance use and offending for their client.

Possible Benefits
You will receive little direct benefit from this project, although we hope you
find participation interesting. Further our hope is that this research will inform
the treatment and rehabilitative options for these dual diagnosis clients by
enhancing knowledge of the needs of this overrepresented population in the
alcohol and other drug sector.

Privacy, Confidentiality and Disclosure of Information
Any information obtained in connection with this project will remain
confidential. The data obtained in connection with this project will be stored
electronically for six years. Data storage will be secured by use of password
protection. Once your answers are submitted, we will be unable to delete your
data as we will not know which data were submitted by you. The collective
data may be presented in written reports or at conferences but no individuals
will be identified.

Results of Project
If you wish to receive a summary of the report at the completion of the project
you are welcome to contact the primary researcher Suzanne Vidler.

Participation is Voluntary
Participation in any research project is voluntary. If you do not wish to take
part you are not obliged to. Your decision whether to take part or not will not
affect your relationship with Moreland Hall or Caraniche.

Ethical Guidelines
This project will be carried out according to the National Statement on Ethical
Conduct in Human Research (2007) produced by the National Health and
Medical Research Council of Australia. This statement has been developed to
protect the interests of people who agree to participate in human research
studies.

The ethics aspects of this research project have been approved by the Human
Research Ethics Committee of Deakin University.

Plain Language Statement & Consent Form to Clinicians
Complaints

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:

The Manager, Research Integrity, Deakin University, 221 Burwood Highway, Burwood Victoria 3125, Telephone: 9251 7129, Facsimile: 9244 6581; research-ethics@deakin.edu.au

Please quote project number (2012-002)

Further Information, Queries or Any Problems
If you require further information, wish to withdraw your participation or if you have any problems concerning this project (for example, any side effects), you can contact the principal researcher:

Suzanne Vidler
School of Psychology
Deakin University
Email: svidlert@deakin.edu.au
AUTHORITY TO EXCHANGE INFORMATION

I, _________________________________________________________________

of ______________________________________ DOB: _____ / _____ / _____

authorize Caraniche to release my ACSO assessment report, which contains
demographic information, such as, my age, gender, alcohol and other drug history,
mental health history, criminal history, health history and information regarding my
relationships and family, to the researcher of the following project as outlined below:

Full Project Title: Exploring the Complex Needs of Substance Using Offenders

Principal Researcher: Dr Tess Knight

Student Researcher: Suzanne Vidler (Candidate, Doctor of Psychology (Forensic))

My consent applies from today until the completion of the research project. My
consent is voluntary and may be withdrawn at any time.

Signature: _______________________ Date: _____ / _____ / _____

WITNESS:

Signature: ____________________________ Date: _____ / _____ / _____

Name:  ___________________________________________

Position:  ___________________________________________
Appendix D: Participant Qualitative Questionnaire

Below are a few questions that we would like you to answer to the best of your ability. We hope that by you answering these questions we will gain a better understanding of the relationship between your substance use and offending.

1. What is the primary function/gain of your substance use?

2. What is the primary function/gain of your offending?

3. Do you feel that there is a link between your substance use and offending? If so, how?

4. Do you feel there is a link between your mental health/well-being and substance use? If so, how?

5. What factors do you think makes it difficult to stop using?

6. What factors do you think makes it difficult to stop offending?

7. If you could change or improve one area of yourself or your circumstances what would it be and why?
Appendix E: Clinician Qualitative Questionnaire

Below are a few questions that we would like you to answer to the best of your ability. We hope that by you answering these questions we will gain a better understanding of your assessment of your clients substance use and offending.

1. What is the primary function/gain of your clients substance use?

2. What is the primary function/gain of your clients offending?

3. What life experiences, if any, do you think resulted in your client’s offending and why?

4. What life experiences, if any, do you think resulted in your clients substance use and why?
5. If you could change or improve one area of your clients functioning or their circumstances what would it be and why?

..............................................................................................................................................
..............................................................................................................................................
..............................................................................................................................................
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Qualitative Questionnaire- Clinicians Page 1 of 1
Appendix F: Statement of Participation

STATEMENT OF PARTICIPATION

I……………………………………………..have participated in the research project
of……………………………………………………………………………………..
entitled……………………………………………………………………………….
and have received payment of……………………………….. for this participation.

Signature………………………………………………………………………

STATEMENT OF PARTICIPATION

I……………………………………………..have participated in the research project
of……………………………………………………………………………………..
entitled……………………………………………………………………………….
and have received payment of……………………………….. for this participation.

Signature………………………………………………………………………

Joanne Buchanan 16/12/2014
Appendix G: Childhood Trauma Questionnaire

Instructions

These questions ask about some of your experiences growing up as a child and a teenager. Although these questions are of a personal nature, please try to answer as honestly as you can. For each question, circle the dot under the response that best describes how you feel. If you wish to change your response, put an X through it and circle your new choice.

Example of corrected response:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>May/Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Response</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changed Response</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<SHARED RESOURCES NOT TRANSLATED>
<table>
<thead>
<tr>
<th>When I was growing up ...</th>
<th>Never True</th>
<th>Slightly True</th>
<th>Somewhat True</th>
<th>Often True</th>
<th>Very Often True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I didn't have enough to eat.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>2. I knew that there was someone to take care of me and protect me.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>3. People in my family called me things like 'stupid,' 'lumpy,' or 'ugly.'</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>4. My parents were too drunk or high to take care of the family.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>5. There was someone in my family who helped me feel that I was important or special.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>6. I had to wear dirty clothes.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>7. I felt loved.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>8. I thought that my parents wished I had never been born.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>9. I got hit so hard by someone in my family that I had to see a doctor or go to the hospital.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>10. There was nothing I wanted to change about my family.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>11. People in my family hit me so hard that it left me with bruises or marks.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>12. I was punished with a belt, a box, a coin, or some other hard object.</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<td>•</td>
</tr>
<tr>
<td>13. People in my family looked out for each other.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>14. People in my family said hurtful or insulting things to me.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>15. I believe that I was physically abused.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>16. I had the perfect childhood.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>17. I got hit or beaten so badly that it was noticed by someone like a teacher, neighbor, or doctor.</td>
<td>•</td>
<td>•</td>
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<td>•</td>
</tr>
<tr>
<td>18. I felt that someone in my family hated me.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>19. People in my family felt close to each other.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>20. Someone tried to touch me in a sexual way, or tried to make me touch them.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>21. Someone threatened to hurt me or tell lies about me unless I did something sexual with them.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>22. I had the best family in the world.</td>
<td>•</td>
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</tr>
<tr>
<td>23. Someone tried to make me do sexual things or watch sexual things.</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<td>•</td>
</tr>
<tr>
<td>24. Someone asked me.</td>
<td>•</td>
<td>•</td>
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</tr>
<tr>
<td>25. I believe I was emotionally abused.</td>
<td>•</td>
<td>•</td>
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</tr>
<tr>
<td>26. There was someone to take me to the doctor if I needed it.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>27. I believe that I was sexually abused.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>28. My family was a source of strength and support.</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>
Scoring

1. For each item, transfer the numerical score for the response that is circled to the corresponding box to the left of the item. Note that Items 2, 5, 7, 13, 19, 26, and 28 are reverse scored. For example, for these items, an endorsement of Very Often True is scored 1 rather than 5.

2. For each maltreatment scale, add the values in the boxes that appear in the column for the scale and enter the sum in the box at the bottom of the column. This number is the Scale Total Score. The range of scores in parentheses underneath the Scale Total Score indicates the minimum and maximum sums for the scale. The higher the score is, the more maltreatment is being reported.

3. For the Minimization/Denial Scale (Items 10, 16, and 22), score the responses as follows:
   - For an item endorsed with a 5 (Very Often True), circle the 1 in the box to the right of the item.
   - For an item endorsed with a 1-4, circle the 0 in the box to the right of the item.

   Add the values for these 3 items and enter the sum at the bottom of that column to derive the Minimization/Denial Scale Total Score. This score reflects the tendency of the respondent to give exaggerated, desirable responses. The range of scores in parentheses indicates the minimum and maximum sums for the scale.

4. In the space below each Scale Total Score, enter the classification for that score.
   Use Table B.1 in Appendix B.

5. A percentile rank for each Scale Total Score may be entered below the classification.
   Use Tables C.1-C.3 in Appendix C according to the reference group chosen.
Appendix H: Post Traumatic Stress Disorder Symptom Scale

**Trauma Center PTSD Symptom Scale**

The purpose of this questionnaire is to measure how you have reacted to upsetting experiences in your life. Please think about the most distressing experience or event that has happened to you and answer the following questions. In the first column to the right of each question, write Y (Yes) or N (No) to indicate whether you have ever had the reaction. If you have never had the reaction, leave the second and third columns blank for that question. If you have had the reaction, fill out the second and third columns as follows: 1) in the second column, write a number from the Frequency Scale to indicate how often you have had the experience in the past two weeks, 2) in the third column, write a number from the Severity Scale to indicate how distressing the reaction has been to you in the past two weeks.

<table>
<thead>
<tr>
<th>Frequency Scale</th>
<th>Severity Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – Not at all</td>
<td>0 – Not at all distressing</td>
</tr>
<tr>
<td>1 – Once per week/a little bit/once in a while</td>
<td>1 – A little bit distressing</td>
</tr>
<tr>
<td>2 – 2 to 4 times per week/half of the time</td>
<td>2 – Moderately distressing</td>
</tr>
<tr>
<td>3 – 5 or more times per week/very much/almost always</td>
<td>3 – Quite a bit distressing</td>
</tr>
<tr>
<td>4 – Extremely distressing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Y/N</th>
<th>Frequency</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

1. Have you had recurrent or intrusive distressing thoughts or recollections about the experience?
2. Have you been having recurrent bad dreams or nightmares about the experience?
3. Have you had the experience of suddenly reliving the experience, flashbacks of it, acting or feeling as if it were re-occurring?
4. Have you been intensely EMOTIONALLY upset when reminded of the experience (including anniversary reactions)?
5. Have you been having intense PHYSICAL reactions (e.g. sweaty, heart palpitations) when reminded of the experience?
6. Have you persistently being making efforts to avoid thoughts or feelings associated with the experience?
7. Have you persistently been making efforts to avoid activities, situations or places that remind you of the experience?
8. Are there any important aspects about the experience that you still cannot recall?
9. Have you markedly lost interest in free time activities since the experience?
10. Have you felt detached or cut off from others around you since the experience?
<table>
<thead>
<tr>
<th></th>
<th>Y/N</th>
<th>Frequency</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Have you felt that your ability to experience emotions is less since the experience (e.g., unable to have loving feelings, feel numb, can't cry when sad, etc.)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Have you felt that any future plans or hopes have changed because of the experience (e.g., no career, marriage, children, or long life)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Have you been having persistent difficulty falling or staying asleep since the experience?</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>14. Have you been continuously irritable or having outbursts of anger since the experience?</td>
<td></td>
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</tr>
<tr>
<td>15. Have you been having persistent difficulty concentrating since the experience?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Are you overly alert (e.g., checking to see who is around you) since the experience?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Have you been jumplier, more easily startled, since the experience?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Trauma Center PTSD Symptom Scale Data Entry Sheet

Instructions:
1. Transcribe endorsement responses (Y/N) from PTSD Symptom Scale onto this sheet.
2. Transcribe raw frequency and severity scores from PTSD Symptom Scale onto this sheet.
3. Calculate total endorsement score for each symptom category by summing the total number of items the patient/subject endorsed (i.e., the total number of items patient/subject answered "Y" to).
4. Calculate total frequency and severity scores for each symptom category by summing scores in each column.
5. Calculate total symptom category score by summing total frequency and severity scores. Do not add endorsement scores to this calculation.

<table>
<thead>
<tr>
<th>Intrusions</th>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endorsement</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Frequency</td>
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<tr>
<td>Severity</td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Avoidance/Numbing</th>
<th>Item</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endorsement</td>
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<td>Frequency</td>
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<td>Severity</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Arousal</th>
<th>Item</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endorsement</td>
<td></td>
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<td></td>
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<tr>
<td>Frequency</td>
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<tr>
<td>Severity</td>
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</tr>
</tbody>
</table>
Trauma Center PTSD Symptom Scale Score Report Sheet

Instructions:

1. Transcribe endorsement, frequency, and severity totals for each symptom from Data Entry Sheet onto this sheet.

2. Transcribe total symptom category score for each symptom from Data Entry Sheet onto this sheet.

3. Calculate overall PTSD symptoms scores for frequency, severity, and total symptom category score by summing the scores in each row. Do not add endorsement scores to this calculation.

4. Calculate overall PTSD symptoms score for endorsement by determining the total number of symptom categories the patient/subject demonstrates (patient/subject receives a score of 1 for each symptom category he/she demonstrates, maximum = 3). In order for a patient/subject to demonstrate a symptom category, he/she must have the following endorsement total for each symptom category:
   - Intrusions: endorsement total must be equal to or greater than 1
   - Avoidance/Numbing: endorsement total must be equal to or greater than 3
   - Arousal: endorsement total must be equal to or greater than 2

<table>
<thead>
<tr>
<th>Endorsement Total</th>
<th>Frequency Total</th>
<th>Severity Total</th>
<th>Total Symptom Category Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrusions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance/Numbing</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Arousal</td>
<td></td>
<td></td>
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<tr>
<td>Overall PTSD</td>
<td></td>
<td></td>
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<tr>
<td>Symptoms</td>
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</tr>
</tbody>
</table>
Appendix I: Self-Report Instrument for Disorders of Extreme Stress

SIDES-SR 4/2002

Instructions:
What follows are descriptions of difficulties that some people experience. After each statement please indicate: 1) whether it has ever been true for you; 2) if yes, how much you have been bothered by that problem in the past month; 3) if no, choose NA for “Not applicable” as the severity rating for the past month.

1. Small problems get me very upset. For example, I get angry at a minor frustration. I cry easily.
   This has been true for me
   How much have you been bothered in the last month?
   None; not at all 0
   Sometimes I overreact a little 1
   Sometimes I get very upset, or everything upsets me more than it used to 2
   Often I get extremely upset, have tantrums 3
   Not applicable NA

2. I find it hard to calm myself down after I become upset and have trouble getting back on track
   This has been true for me
   How much have you been bothered in the last month?
   None; not at all 0
   I get momentarily upset 1
   It keeps coming back to me hour after hour 2
   I get completely consumed by it 3
   Not applicable NA

3. When I feel upset, I have trouble finding ways to calm myself down.
   This has been true for me
   How much have you been bothered in the last month?
   None; not at all 0
   I need to make special efforts to calm myself (e.g., talking, sports, listening to music) 1
   I need to stop everything and focus all my energy on calming down 2
   I need to resort to extreme measures, like getting drunk, taking drugs, or doing other harmful things to my body 3
   Not applicable NA

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4. I feel angry most of the time
   This has been true for me
   How much have you been bothered in the last month?
   None; not at all 0
   I feel quite angry but I am able to shift to other matters 1
   My anger gets in the way of doing things 2
   My anger dominates my daily life 3
   Not applicable NA

5. I have thoughts or images of hurting somebody else.
   This has been true for me
   How much have you been bothered in the last month?
   None; not at all 0
   Yes, fleeting thoughts 1
   I think about hurting people every day 2
   I can't stop thinking about hurting people 3
   Not applicable NA

6. I have trouble controlling my anger.
   This has been true for me
   How much have you been bothered in the last month?
   None; not at all 0
   I snap at people 1
   I yell or throw things 2
   I actually attack people physically 3
   Not applicable NA

7. I worry about people finding out how angry I am.
   This has been true for me
   How much have you been bothered in the last month?
   None; not at all 0
   I have trouble confronting someone when they hurt me 1
   I do not confront the person I'm angry at, but I show my anger in other ways 2
   I do not let anyone know in words or actions that I am angry 3
   Not applicable NA
8. Since the experience, or as long as I can remember, I have been in accidents or near accidents.
   
   This has been true for me
   
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

   How much have you been bothered in the last month?
   
<table>
<thead>
<tr>
<th>None; not at all</th>
<th>Occasional accidents causing harm or pain but not requiring medical attention</th>
<th>One accident or episode requiring medical attention</th>
<th>More than one serious accident or episode requiring medical attention</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>NA</td>
</tr>
</tbody>
</table>

9. I find myself careless about making sure that I am safe.
   
   This has been true for me
   
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

   How much have you been bothered in the last month?
   
<table>
<thead>
<tr>
<th>None; not at all</th>
<th>I think about the risks involved in relationships or situations, but do it anyway</th>
<th>I take undue risks regarding the people I am with or places I visit</th>
<th>I keep company with people who I know could be dangerous, not taking measures to protect myself in dangerous situations</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>NA</td>
</tr>
</tbody>
</table>

10. I have deliberately tried to hurt myself (like burning or cutting myself).
    
    This has been true for me
    
    | Yes | No |
    |-----|----|
    |     |    |

    How much have you been bothered in the last month?
    
    | None; not at all | I hit or kick objects | I hurt myself deliberately (pinching, scratching, hitting, banging) without serious damage | I hurt myself deliberately in ways that cause serious physical damage | Not applicable |
    |------------------|----------------------|---------------------------------|---------------------------------|----------------|
    | 0                | 1                    | 2                               | 3                               | NA             |

11. I have thought about killing myself.
    
    This has been true for me
    
    | Yes | No |
    |-----|----|
    |     |    |

    How much have you been bothered in the last month?
    
    | None; not at all | I was preoccupied, but had no plan | I made gestures or was chronically preoccupied with plans | I made one or more serious suicide attempts | Not applicable |
    |------------------|---------------------------------|-----------------------------|---------------------------------|----------------|
    | 0                | 1                               | 2                           | 3                               | NA             |
12. I make active efforts to keep myself from thinking about sex.

<table>
<thead>
<tr>
<th>This has been true for me</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much have you been bothered in the last month?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None, not at all</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>I try not to think about sex</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>I work very hard not to think about sex</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I will not tolerate any thoughts about sex</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

13. It bothers me to be touched in general.

<table>
<thead>
<tr>
<th>This has been true for me</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much have you been bothered in the last month?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None, not at all</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Sometimes it bothers me</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>It often or regularly bothers me</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I simply could not stand it</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

14. It bothers me to be touched in a sexual way.

<table>
<thead>
<tr>
<th>This has been true for me</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much have you been bothered in the last month?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None, not at all</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Sometimes it bothers me</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>It often or regularly bothers me</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I simply could not stand it</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

15. I actively avoid sex.

<table>
<thead>
<tr>
<th>This has been true for me</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much have you been bothered in the last month?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None, not at all</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>I find myself making excuses</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>I try not to have sex</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I don’t have sex</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>
16. I find myself thinking about sex more than I want to.
   This has been true for me
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   How much have you been bothered in the last month?
   | None; not at all | 0 |
   | I think about it too much | 1 |
   | It distracts me from what I should be doing | 2 |
   | I am obsessed with it | 3 |
   | Not applicable | NA |

17. I find myself driven to engage in sexual activities without really feeling that I had a choice.
   This has been true for me
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   How much have you been bothered in the last month?
   | None; not at all | 0 |
   | I feel the urge, but I do not act on it | 1 |
   | I feel compelled to, but I force myself to stop | 2 |
   | I engage in compulsive sex | 3 |
   | Not applicable | NA |

18. I am active sexually in ways that I know put me in danger.
   This has been true for me
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

   How much have you been bothered in the last month?
   | None; not at all | 0 |
   | I am a bit careless | 1 |
   | I talk myself into ignoring the danger or I only see the danger afterwards | 2 |
   | I knowingly put myself in danger | 3 |
   | Not applicable | NA |

19. I expose myself to situations that might be dangerous, e.g. I get involved with people who might hurt me. I got to places that are not safe. I drive too fast.
   This has been true for me
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   How much have you been bothered in the last month?
   | None; not at all | 0 |
   | I am a bit careless | 1 |
   | I talk myself into ignoring the danger or I only see the danger afterwards | 2 |
   | I knowingly put myself in danger | 3 |
   | Not applicable | NA |
20. There are parts of my life that I cannot remember, or I am confused about what happened, or I am unsure whether certain important things did or did not happen to me.

This has been true for me

Yes  No

How much have you been bothered in the last month?

None; not at all 0
There are a few memory lapses 1
There are important gaps in my memory; there are missing periods 2
I have no memory for days, months, or years of my life 3
Not applicable NA

21. I have difficulty keeping track of time in my daily life.

This has been true for me

Yes  No

How much have you been bothered in the last month?

None; not at all 0
I regularly show up in the wrong place at the wrong time 1
I am unable to keep track of my daily life 2
Not applicable NA

22. I ‘space’ out when I feel frightened or under stress.

This has been true for me

Yes  No

How much have you been bothered in the last month?

None; not at all 0
I am withdrawn at times 1
I go into my own world and do not let other people in 2
I feel like I stop existing 3
Not applicable NA

23. I sometimes feel so unreal that it is as if I am living in a dream, or not really there, or behind a glass wall.

This has been true for me

Yes  No

How much have you been bothered in the last month?

None; not at all 0
I feel unreal at times but I can easily be brought back 1
I feel unreal a lot and have difficulty getting back 2
I regularly feel totally disconnected from my surroundings 3
Not applicable NA
24. I sometimes feel like there are two people living inside me who control how I behave at different times.  

This has been true for me  

<table>
<thead>
<tr>
<th>How much have you been bothered in the last month?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>None; not at all</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>I am a very different person in different settings</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>It feels like different parts of me are in competition over how I should behave</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>There are separate parts of me that take control at different times</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

25. I have the feeling that I basically have no influence on what happens to me in my life.  

This has been true for me  

<table>
<thead>
<tr>
<th>How much have you been bothered in the last month?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>None; not at all</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>I do not take initiative in routine activities</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>At times, I do not bother to keep appointments, do not go out, do not return phone calls, do not take care of myself (e.g. my personal hygiene, shopping, eating.)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I simply do not bother to take care of myself</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

26. I feel that I have something wrong with me after what happened to me, that can never be fixed.  

This has been true for me  

<table>
<thead>
<tr>
<th>How much have you been bothered in the last month?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>None; not at all</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>I feel wounded, but that I can get better</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>I feel that parts of me are damaged but some parts of me still function</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I feel like I am a permanently damaged person</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

27. I feel chronically guilty about all sorts of things.  

This has been true for me  

<table>
<thead>
<tr>
<th>How much have you been bothered in the last month?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>None; not at all</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>I feel more responsible than I need to for things that go wrong</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>I blame myself for things that go wrong even when I had nothing to do with it</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I blame myself and punish myself for whatever goes wrong, even when I have nothing to do with it</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>
28. I am too ashamed of myself to let people get to know me.  (How far did you go to hide from others? Did you avoid talking with people? Make up a cover story?)

<table>
<thead>
<tr>
<th>This has been true for me</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>None; not at all</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>I make up stories to hide things I'm ashamed of</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>I avoid letting most people know who I really am for fear that they'll get to know me</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I let no one get close to me to make sure they won't find out who I really am</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

29. I feel set apart and very different from other people.

<table>
<thead>
<tr>
<th>This has been true for me</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>None; not at all</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>I feel quite different from people around me</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>I feel different from others and distant, estranged, or alienated from them</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I feel like I am from another planet and don't belong anywhere</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

30. People make too big a deal about the dangerousness of situations that I get involved in.

<table>
<thead>
<tr>
<th>This has been true for me</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>None; not at all</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Minimal</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Severe</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

31. I have trouble trusting people.

<table>
<thead>
<tr>
<th>This has been true for me</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>None; not at all</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>I am guarded and am suspicious of people's motives</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>People need to prove themselves over and over again before I let my guard down</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I don't trust anybody</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>
32. I avoid having relationships with other people.

This has been true for me

How much have you been bothered in the last month?

None; not at all 0
I arrange to have lots of time by myself 1
I do not initiate contact with others. I do not make phone calls or write letters 2
I do not return phone calls, reply to letters. I stop conversations as soon as I can 3
Not applicable NA

33. I have difficulty working through conflicts in relationships.

This has been true for me

How much have you been bothered in the last month?

None; not at all 0
I am quiet or avoid situations that might cause conflict, or I am easily hurt and offended 1
I have trouble hearing other viewpoints, or have difficulty standing up for myself 2
I quit jobs and relationships without negotiating. I threaten to sue people if they offend me, I can't stand it if people disagree with me 3
Not applicable NA

34. I find that other traumatic experiences keep happening to me.

This has been true for me

How much have you been bothered in the last month?

None; not at all 0
I find myself occasionally hurt in relationships 1
I repeatedly find myself hurt in relationships 2
I am seriously hurt by people I love or thought I could trust 3
Not applicable NA

35. I have hurt other people in ways similar to how I was hurt.

This has been true for me

How much have you been bothered in the last month?

None; not at all 0
People have told me once or twice that I am hurtful 1
People have told me several times that I am hurtful, or I deliberately hurt people 2
I seriously hurt or injure other people in ways that are similar to ways I have been hurt myself 3
Not applicable NA
36. I have trouble with (circle item that apply), yet doctors have not found a clear cause for it.
   a) vomiting
   b) abdominal pain
   c) nausea
   d) diarrhea
   e) intolerance of food

   This has been true for me
   Yes  No

   How much have you been bothered in the last month?
   None; not at all 0
   It is a minor problem that bothers me a little but does not affect my daily life 1
   It is a serious enough problem to affect my daily life 2
   It is a disabling problem that severely limits my daily life 3
   Not applicable NA

37. I suffer from chronic pain (circle items that apply), yet doctors could not find a clear cause for it.
   a) in your arms and legs
   b) in your back
   c) in your joints
   d) during urination
   e) headaches
   f) elsewhere

   This has been true for me
   Yes  No

   How much have you been bothered in the last month?
   None; not at all 0
   It is a minor problem that bothers me a little but does not affect my daily life 1
   It is a serious enough problem to affect my daily life 2
   It is a disabling problem that severely limits my daily life 3
   Not applicable NA

38. I suffer from (circle items that apply), yet doctors have not found a clear cause for it.
   a) shortness of breath
   b) palpitations
   c) chest pain
   d) dizziness

   This has been true for me
   Yes  No

   How much have you been bothered in the last month?
   None; not at all 0
   It is a minor problem that bothers me a little but does not affect my daily life 1
   It is a serious enough problem to affect my daily life 2
   It is a disabling problem that severely limits my daily life 3
   Not applicable NA

39. I suffer from trouble with (circle items that apply), yet doctors have not found a clear cause for it.
   a) remembering things
   b) swallowing
   c) losing your voice
   d) blurred vision
   e) actual blindness
   f) fainting and losing consciousness
   g) seizures and convulsions
   h) being able to walk
   i) paralysis or muscle weakness
   j) urination

   This has been true for me
   Yes  No

   How much have you been bothered in the last month?
   None; not at all 0
   It is a minor problem that bothers me a little but does not affect my daily life 1
   It is a serious enough problem to affect my daily life 2
   It is a disabling problem that severely limits my daily life 3
   Not applicable NA
40. I suffer from (circle items that apply), yet doctors have not found a clear cause for it.
   a) burning sensations in your sexual organs or rectum (not during intercourse)
   b) impotence
   c) irregular menstrual periods
   d) excessive pre-menstrual tension
   e) excessive menstrual bleeding

   This has been true for me
   None, not at all 0
   It is a minor problem that bothers me a little but does not affect my daily life 1
   It is a serious enough problem to affect my daily life 2
   It is a disabling problem that severely limits my daily life 3
   Not applicable NA

41. I feel hopeless and pessimistic about the future.

   This has been true for me
   Yes  No

   How much have you been bothered in the last month?
   None, not at all 0
   I get discouraged and lose interest in planning for myself 1
   I don't see a future and go through the motions of living 2
   I feel condemned and have no future left 3
   Not applicable NA

42. I do not expect to be able to find happiness in love relationships.

   This has been true for me
   Yes  No

   How much have you been bothered in the last month?
   None, not at all 0
   I sometimes feel distant and disconnected from my loved ones 1
   I go through the motions of relationships, but feel numb 2
   I don't feel part of the human race, and cannot imagine ever loving anybody 3
   Not applicable NA

43. I am unable to find satisfaction in work.

   This has been true for me
   Yes  No

   How much have you been bothered in the last month?
   None, not at all 0
   Sometimes it is a routine, but I can find reason to keep going 1
   I have difficulty finding meaning in work or I cannot think of work that would be meaningful 2
   Work is pointless 3
   Not applicable NA
44. I believe that life has lost its meaning.

This has been true for me

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</table>

How much have you been bothered in the last month?

<table>
<thead>
<tr>
<th>None; not at all</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sometimes it seems pointless</td>
<td>1</td>
</tr>
<tr>
<td>I cannot think of a good reason, but I keep on living</td>
<td>2</td>
</tr>
<tr>
<td>I live in a huge void</td>
<td>3</td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
</tr>
</tbody>
</table>

45. There have been changes in my philosophy or religious beliefs—or in the religious beliefs or philosophical beliefs I grew up with.

This has been true for me

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
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</table>

How much have you been bothered in the last month?

<table>
<thead>
<tr>
<th>None; not at all</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>My beliefs have changed, but it was a normal progression of life</td>
<td>1</td>
</tr>
<tr>
<td>I am disillusioned with the religious beliefs I grew up with</td>
<td>2</td>
</tr>
<tr>
<td>I hate the religious beliefs I grew up with</td>
<td>3</td>
</tr>
<tr>
<td>Not applicable</td>
<td>NA</td>
</tr>
</tbody>
</table>
Appendix J: Regen and Caraniche Consent Forms

TO: Moreland Hall

Organisational Consent Form

Full Project Title: Exploring the Role and Patterns of Developmental Trauma in Substance Using Offenders

Reference Number: (submitted after Deakin Ethics Committee approval)

I have read and I understand the attached Plain Language Statement.

I give my permission for clients of Moreland Hall to be asked to participate in this project in a way that is consistent with the details in the plain language statement.

I have been given a copy of the Plain Language Statement and Consent Form to keep.

The researcher has agreed not to reveal the participants' identities and/or personal details if information about this project is published or presented in any public forum.

As the representative of the agency, I note that

1. The organisation WILL NOT be named in research publications or other publicity without prior agreement.

2. I agency WILL receive a copy of the research findings or publications.

3. I understand that this project will not commence without first receiving approval by the Department of Justice Ethics Committee and Deakin University's Ethics Committee.

Name of person giving consent (printed)

..................................................  ..................................................
Signature . Date 4-8-11

Executive Officer

Address of researchers:

LAURENCE ALVIS
CHIEF EXECUTIVE OFFICER
UNITINGCARE MORELAND HALL
28 JESSIE STREET
MORELAND VIC 3058

Signature Redacted by Library
TO: Caraniche

Organisational Consent Form

Full Project Title: Exploring the Role and Patterns of Developmental Trauma in Substance Using Offenders

Reference Number: (submitted after Deakin Ethics Committee approval)

I have read and I understand the attached Plain Language Statement.

I give my permission for clients of Caraniche to be asked to participate in this project in a way that is consistent with the details in the plain language statement.

I have been given a copy of the Plain Language Statement and Consent Form to keep.

The researcher has agreed not to reveal the participants' identities and/or personal details if information about this project is published or presented in any public forum.

As the representative of the agency, I note that

1. The organisation WILL NOT be named in research publications or other publicity without prior agreement.
2. I agency WILL receive a copy of the research findings or publications.
3. I understand that this project will not commence without first receiving approval by the Department of Justice Ethics Committee and Deakin University's Ethics Committee.

Name of person giving consent (printed)

Signature:

Executive Officer

Address of researchers:

Signature Redacted by Library
Dr Terry Bartholomew  
School of Psychology, Deakin University.  
221 Burwood Highway  
Burwood, VIC  
3125  
Phone: 03 9244 6207  
Fax: 03 92446858  
E-mail: terry.bartholomew@deakin.edu.au

Suzanne Vidler PsyCh (Forensic) Candidate  
School of Psychology, Deakin University.  
221 Burwood Highway  
Burwood, VIC  
3125  
Phone: 0401386058  
Fax: 03 92446858  
E-mail: svidler@deakin.edu.au
Appendix K: National Ethics Application Form Approval

Memorandum

To: Dr Tess Knight
School of Psychology
B

cc: Ms Suzanne Vidler-Tarjan

From: Deakin University Human Research Ethics Committee (DUHREC)

Date: 03 April, 2012

Subject: 2012-002

Exploring the role and patterns of developmental trauma in Substance Using Offenders

Please quote this project number in all future communications

The application for this project was considered at the DUHREC meeting held on 13/02/2012.

Approval has been given for Ms Suzanne Vidler-Tarjan, under the supervision of Dr Tess Knight, School of Psychology, to undertake this project from 30/4/2012 to 30/4/2016.

The approval given by the Deakin University Human Research Ethics Committee is given only for the project and for the period as stated in the approval. It is your responsibility to contact the Human Research Ethics Unit immediately should any of the following occur:

- Serious or unexpected adverse effects on the participants
- Any proposed changes in the protocol, including extensions of time.
- Any events which might affect the continuing ethical acceptability of the project.
- The project is discontinued before the expected date of completion.
- Modifications are requested by other HRECs.

In addition you will be required to report on the progress of your project at least once every year and at the conclusion of the project. Failure to report as required will result in suspension of your approval to proceed with the project.

DUHREC may need to audit this project as part of the requirements for monitoring set out in the National Statement on Ethical Conduct in Human Research (2007).

Human Research Ethics Unit
research-ethics@deakin.edu.au
Telephone: 03 9251 7123