# The Lurking Shadow:

# A qualitative study of the experience of residual symptoms following a violent crime.

by

**Celestè-Mari Benadé**

**A mini-dissertation submitted in part fulfilment**

**of the requirements for the degree of**

**MAGISTER ARTIUM**

in

**Clinical Psychology**

**In the Department of Psychology at the**

**UNIVERSITY OF PRETORIA**

**FACULTY OF HUMANITIES**

**Supervisor: Dr. Linda L.M. Eskell-Blokland**

**March 2014**

# DECLARATION

I, Celestè-Mari Benadé, student number 22330667, declare that the dissertation "**The Lurking Shadow: A qualitative study of the experience of residual symptoms following a violent crime",** which I hereby submit for the degree of MA: Clinical Psychology at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

_____ _____

Signature Date

Me. C. Benadé

# ACKNOWLEDGEMENTS

Firstly I would like to give thanks to my Shepherd and Saviour who gave me the strength and courage to complete this journey and for sending his earthly angels along my path when I needed them. I would also like to thank the following people for their help and continual support throughout this process:

- Dr Linda Blokland, my supervisor.

  Thank you for your unwavering support and willingness to help me throughout this process. Thank you for your guidance and help. I could not have done it without you.

- My parents.

  Mom and Trevor - Thank you for your love and support throughout this process. Thank you for believing in me when my own belief faltered and for being strong when my own legs failed. Love you!

- Leon.
  My rock, my love, my best friend. Thank you for your unending support, encouraging words and guidance throughout this process.

- My friends.

  Thank you for standing by my and giving me courage throughout this process.

# ABSTRACT

This research explores the beliefs and behaviour of individuals who have suffered a traumatic experience, specifically the violent crimes of assault, motor vehicle hijackings and armed robbery. The researcher focuses on the occurrence of residual, subclinical symptoms of PTSD that individuals experience subsequent to the specified violent crimes. By identifying and describing trends in commonalities that exist between research participants' accounts of such residual, subclinical symptoms the research aims to explore and describe these trends, enabling a common understanding and awareness of the longstanding effects that these experiences have on individuals.

The qualitative research design allowed for an exploration aimed at understanding the meaning that individuals ascribe to specific events. Three case studies were examined. The researcher ensured the exclusion of individuals who met the criteria for PTSD by making use of the PCL-S. From this approach a thematic analysis was done using the transcriptions of audiotaped interviews with the participants. The three participants chosen for the study were aged twenty-nine (29), thirty (30) and thirty-one (31) independently. Two of the participants experienced an armed robbery, which were, independently, followed by non-violent crime of housebreaking and theft. A third participant experienced an armed robbery during her early childhood, and an additional crime of aggravated robbery in adulthood. The studied violent crimes had taken place between one year eleven months and six years prior to this study. None of the participants have received therapy following their traumatic experience.

Five important findings were identified and discussed. Firstly, some individuals still meet the requirements for a diagnosis of PTSD, even years following their experiences with traumatic events. Secondly, following the experience of a violent crime some individual's core cognitive schemas regarding themselves, their world and their relationships undergo various changes. Thirdly, some individuals experience numerous posttraumatic symptoms, which are not extensive enough to validate the diagnosis of PTSD, but that affect the individual's life on a regular basis. Nine symptoms were identified in this study. Fourthly, some individuals may experience additional effects following exposure to violent crimes, e.g. physical illness, that

is not classified as posttraumatic symptoms. Fifthly, a few individuals who have been the victim of more than one crime may experience cumulative or diminished effects when one explores the overall effects of revictimisation. Results also indicated that individuals may experiences similar posttraumatic symptoms, but that the presentation of these symptoms are unique and are influenced by an individual's history, cognitive schemas and the characteristics of the crimes that they have experienced. Finally, these findings explored and described the phenomenon of partial posttraumatic stress disorder in order to expand the understanding of this occurrence.

# KEYWORDS:

TRAUMA
PTSD (POSTTRAUMATIC STRESS DISORDER)
PARTIAL PTSD (PARTIAL POSTTRAUMATIC STRESS DISORDER)
RESIDUAL SYMPTOMS
SUBCLINICAL SYMPTOMS
VIOLENT CRIME
ROBBERY
MOTOR VEHICLE HIJACK
ASSAULT
COGNITIVE BEHAVIOURAL THERAPY

# TABLE OF CONTENT

## CONTENTS Page

# CONTENTS Page

## CONTENTS Page

# CONTENTS Page

# CHAPTER 1:

# Introduction, problem statement, concept definition and procedures

## 1.1 Introduction

The current unacceptably high crime rate in South Africa has an immense impact on the lives of those affected by a traumatic experience. The impact of the experience is evident on the emotional, physical and social levels of the victims. Initially the majority of studies were focussed on the diagnosis of acute stress disorder (ASD) and posttraumatic stress disorder (PTSD). It is only during the last two decades that the importance of studying the lasting, subclinical symptoms of posttraumatic stress disorder (PTSD) resulting from exposure to violent crime became significant. This qualitative study explores and describes the residual, subclinical symptoms that individuals experience subsequent to violent crimes in order to expand the occurrence of this phenomenon.

## 1.2 Problem statement

The challenge of this study is to explore and describe the phenomenon of partial posttraumatic stress disorder within a select number of participants. This phenomenon manifests as residual, subclinical symptoms which are not substantial enough to meet the criteria of posttraumatic stress disorder but still have a significant impact on the lives of those subjected to a traumatic event of violent crime. For the purpose of this study 'violent crime' will be reduced to include only the following: motor vehicle hijacking, assault and armed robbery.

The study will only include in the target group persons that comply with the following criteria:

i. The date of the incident should not be less than one year before participation in this study;
ii. The perpetrator must be unknown to the victim;

iii. The participant's exposure to violent crime should be limited to the incident investigated in this study;
iv. By the time of participating in this study the participant should not meet the criteria of posttraumatic stress disorder;
v. Symptoms currently experienced should have persisted for more than a year after the date of the incident; and
vi. Must be momentous enough to influence the research participant's life on a regular basis.

## 1.3 The aim of the study

The aim of this research study is threefold.

Firstly: To explore the occurrence of residual, subclinical symptoms that individuals experience subsequent to surviving a violent crime.

Secondly: To describe similarities that exist between the research participants' accounts of such residual, subclinical symptoms.

Thirdly: To describe the phenomenon of partial posttraumatic stress disorder in order to expand the understanding of the occurrence.

The long term effects of crimes such as rape and sexual assault, as well as family violence has been extensively researched and will not be included in this study. Some of the most important findings are noted below.

Plichta (in Osofsky, 1999) estimated that about 3% or about 1,8 million women in the United States were severely assaulted by their male partners over a course of a year. The National Center for Injury Prevention and Control, Division of Violence Prevention, Family and Intimate Violence (in Osofsky, 1999) believe that the percentage of women who are victims of sexual assault, physical violence; as well as verbal or emotional abuse is as high as 65%. These crimes leave lasting consequences. Rape in women may lead to posttraumatic stress disorder, mood disorders, substance abuse, as well as eating- and sexual disorders (Faravelli, Guigni, Salvatori, & Ricca, 2004); increased alcohol use (McMullin & White, 2006); long-term health problems (Campbell & Wasco, 2005); sleeping disorders, feelings of insecurity, low self-esteem

as well as troubled relationships (The Centre for the Study of Violence and Reconciliation, 2007).

Similarly, male rape victims may suffer low self-esteem, isolation, shame and emotional pain, harbouring feelings of revenge, a need to silence others who know about the traumatic event (CSVR, 2007); long-term health problems (Coxell & King in Walker, Archer, & Davies, 2005); somatic symptoms, anxiety, insomnia, social dysfunction, depression (Walker et al., 2005); increased feelings of anger and vulnerability, emotional distancing, self-blame as well as self-harming behaviours (Walker et al., 2005). Campbell and Wasco (2005) are also of the opinion that the impact of sexual assault extends far beyond rape survivors as it also affects their family, friends, significant others as well as the health care workers who treat them.

There has also been extensive research about the effects of childhood sexual abuse. In 2006, Navalta, Polcari, Webster, Boghossian, and Teicher noted that not all persons who were exposed to childhood sexual abuse develop a psychiatric condition later on in life. MacMillan et al. (2001) agreed with this conclusion, adding that both physical and sexual abuse appears to be important markers for a higher likelihood of a range of psychiatric disorders in both men and women, with this appearing to be stronger for women than for men.

Long-term effects of childhood sexual abuse include, but are not limited to: anxiety disorders, major depression, alcohol or illicit drug abuse or dependence (MacMillan et al., 2001); as well as a lifetime history of more exposure to various traumas and higher levels of mental health symptoms than individuals without such a history (Banyard, Williams, & Siegel, 2001). It has also been noted that cognitive deficits such as short-term memory deficits, lower levels of intellectual ability, abstract reasoning and executive functioning (Navalta et al., 2006); and less academic engagement, social skills deficits (Shonk & Cicchetti, 2001);can be seen in children who have suffered abuse.

Children who have undergone physical abuse have a higher incidence of antisocial behaviour when compared to individuals without such a history (MacMillan et al., 2001). In 2006, Teicher, Samson, Polcari, and McGreenery found that verbal

aggression in childhood may result in a lowered self-esteem, and poorer social functioning. The latter also noted that emotional abuse may be a more important precursor of dissociation than sexual abuse.

Hildyard and Wolfe (2002) stated that child neglect may have damaging short-term and long-term effects on a child's development. When compared to physically abused children, neglected children have more extensive cognitive and academic difficulties, social withdrawal and limited peer interactions, and internalising (as opposed to externalising) problems. Although the majority of studies suggest that childhood abuse and neglect impacts negatively on cognitive outcomes, findings have been mixed with different profiles of abuse producing differing effects. For example, Stein, Kennedy and Twamley (in Revington, Martin, & Seedat, 2011) found no consistent relationship between neuropsychological functioning and severity of childhood abuse, whereas Kendall-Tackett and Eckenrode (in Revington, Martin, & Seedat, 2011) found that neglected children performed more poorly academically than non-abused children, with the decline in academic performance exacerbated when neglect and abuse occurred together.

These studies and findings validate the scope of effects of violent crimes to exclude crimes such as rape, sexual assault, family violence and neglect that has a lasting impact on various levels of the victim's life.

The effect of violent crime is also mediated by additional variables, such as the influence of prolonged exposure to trauma and knowing the perpetrator. The following research substantiates this. It has been confirmed that the exposure to more than one incident of violent crime and/or the prolonged physical and psychological violence of known perpetrators lead to a wide range of health concerns. These health concerns can be split into two categories. The first, psychological conclusions include, but are not limited to, posttraumatic stress disorder and co-morbid major depressive disorder (Campbell, 2002; Golding, 1999; Nixon, Resick, & Nishith, 2004); suicidality (Golding, 1999); and substance abuse (Coker et al., 2002; Golding, 1999). The second, physical matters include, but are not limited to, physical injury (Campbell, 2002; Coker et al., 2002; Furlow, 2010); chronic pain, (Campbell, 2002); an increased risk of developing a chronic disease (Coker et al., 2002); detrimental

outcomes in pregnancy such as an increased risk of antepartum haemorrhaging, intrauterine growth restriction as well as perinatal death (Campbell, 2002; Janssen et al., 2003); gastrointestinal complaints and gynaecological complaints including sexually transmitted diseases (Campbell, 2002).

Studies on prolonged exposure to trauma, such as childhood physical and sexual abuse found a definite relationship between childhood sexual abuse and adult victimisation (Follette, Polusny, Bechtle, & Naugle, 1995; Hetzel & McCanne, 2005; Jirapramukpitak, Harpham, & Prince, 2011; Pallavi, Mechanic, & Resick, 2000; Roodman & Clum, 2001; Pico-Alfonse, 2005). Pallavi et al. (2000) noted that the revictimisation of individuals contributed to the development of posttraumatic stress disorder symptoms within a cumulative context of other adult trauma. Brown, Hill, and Lambert (2005) found that an accumulation of exposures to violence is linked to greater mental distress. Scott-Storey (2011) when exploring the cumulative exposure to violent crime and its negative impact on an individual's health, stated that it is important to consider the character of the individual and the nature and extent of the abuse as well as other life adversities with the aim of fully understanding the extent of cumulative abuse as well as its consequences on an individual's life.

According to Hetzel and McCanne (2005), cumulative exposure to serious violent crimes leads to an increased risk for developing PTSD, especially if the individual experienced peritraumatic dissociation. These studies evidently referred to and focussed sufficiently on symptoms associated with PTSD and explored the possibility of co-morbid diagnoses, such as substance abuse disorders, mood disorders, and others which often correlates with the presence of PTSD.

In an effort to expand the body of knowledge in this regard, this study focuses on those areas less researched. The psychological impact of a single occurrence of violent crime, specifically car hijacking, robbery and assault, perpetrated by a person unknown to the victim without the manifestation of co-morbid diagnoses.

The following considerations influenced and motivated this study:

- The researcher's personal experience of crime, namely armed robbery. Even after undergoing therapy, the researcher became aware of slight changes in her behaviour and reactions to certain events. When these were explored with friends and family members who have also been victims of violent crimes as described in the focus of this study, it became evident that they shared similar effects on behaviours and reactions. It was further noted that they found it difficult to publicly discuss how the violent crimes affect their lives. This is substantiated by Stansfeld (2002, p.1) when he said: "People seemed determined not to show the world how such traumatic events had affected their lives." Norris, Kaniasty, and Thompson (in Hill, 2004) stated that all crime victims experience some distress upon being victimised, but despite this, attempt to "tough it out".
- Evidence that the lasting effects of crimes such as car hijacking, assault and armed robbery, which occur on a daily basis in South Africa, have not been sufficiently researched. Davis, Taylor, and Lurigio (in Stansfeld, 2002) are of the opinion that compared to rape, less is known about the psychological effects of other serious crimes. Friedland (in Macritchie, 2006) agrees with this statement and declares that reactions to criminal violence have remained relatively unexplored in the field of trauma.
- Little scientifically founded findings are available on the subtle, lasting effects of traumatic events, especially due to violent crimes. When exploring the emotional effects of crime on individuals, one is flooded with personal accounts of the impact of the trauma, symptoms experienced, as well as ways to successfully manage the symptoms. These need to be explored and be scientifically, critically and objectively analysed and the findings recorded. The exceptionally high crime rate in South Africa is resulting in an acceptance of criminal violence as part of life (normality) and the impact thereof gets minimised. Eagle (in Macritchie, 2006) confirms this when he argues that victims of violent crime deserve broader and deeper study as a traumatised population.
- The exploration and description of the phenomenon of partial posttraumatic stress disorder (PPTSD) in order to expand the existing knowledge on the occurrence.

## 1.4 Definition of concepts

Assault

Bartol (2002, p.217) defines assault as "the intentional inflicting of bodily injury on another person, or the attempt to inflict such injury". Bartol (2002) continues by describing the differences between aggravated assault and simple assault. The term aggravated assault is used when the perpetrator intends to inflict serious injury, frequently with the use of a deadly weapon. Simple assault is the intentional infliction, or attempt, of less than serious bodily injury without the use of a weapon.

Motor vehicle hijacking

According to the Quarterly Report of the SAPS of 1998 (in Davis et al., 2002, p.143) "motor vehicle hijacking is a subcategories of armed robbery and consequently perpetrators brought to justice will then be charged with robbery with aggravating circumstances in Court and not with motor vehicle hijacking."

Partial Posttraumatic Stress Disorder (partial PTSD)

Weiss, Marmar, Schlenger, Fairbank, Jordan, Hough, and Kulka (1992, p.365) views partial PTSD as "individuals who have clinically significant symptoms of PTSD, but who do not meet the full diagnostic criteria." Mylle and Maes (2004) were of the opinion that if an individual meets criteria F of post-traumatic stress disorder, i.e. "The disturbance cause clinically significant distress or impairment in social, occupational, or other important areas of functioning" (APA, 2000, p.468), without meeting the other criteria for the disorder, the individual should receive the diagnosis of partial posttraumatic stress disorder.

Posttraumatic Stress Disorder (PTSD)

Sadock and Sadock (2003, p.623) describe posttraumatic stress disorder as "a syndrome that develops after a person sees, is involved in, or hears of an extreme

traumatic stressor". Following this event the individual may react with fear and helplessness, continual reliving of the event and tries to avoid anything associated with the event. The individual may exhibit depression, anxiety, numbing of responsiveness, cognitive difficulties (such as impairment in concentration) as well as hyperarousal.

Residual symptoms

According to Corsini (2002, p.833) residual refers to: "A condition in which acute symptoms have subsided, but chronic or less severe symptoms remain."

Robbery

Bartol (in Davis, et al., 2002, p.117) describes robbery as "taking or attempting to take anything of value from another person by force or threat of force".

Subclinical symptoms

Vila, Porche and Mouren-Someoni (1999, p.747) define subclinical PTSD as an incomplete form of PTSD with at least DSM-IV Criteria A (trauma exposure) and F (impairment) of PTSD, a duration of more than one month (Criteria E of PTSD), and at least one item of Criteria B (the traumatic event is re-experienced in a variety of ways), two items of Criteria C (persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness), and one item of Criteria D (persistent symptoms of increased arousal)." The author found this definition very constrictive, as it may exclude certain individuals who may require treatment, therefore this study will utilise the definition provided by Mylle and Maes (2004).

Mylle and Maes (2004) are of the opinion that an individual with partial posttraumatic stress disorder may present with a number of symptoms below the threshold for Criteria B (the traumatic event is re-experienced in a variety of ways), Criteria C (persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness) and Criteria D (persistent symptoms of increased arousal) of posttraumatic stress disorder.

Trauma

Brewin, Dalgleish, and Joseph (1996, p.675) defines trauma as "any experience that by its occurrence has threatened the health or well-being of an individual." Horowitz, Janoff-Bulman, and Parkes (in Brewin et al., 1996, p.675) suggests that trauma generally involves a violation of an individual's basic assumptions connected to survival within a social group, for example the existence of orderly relations between actions and consequences or the assumption of invulnerability.

Violent Crime

The definition of violent crime used in this study is provided by the Department of Criminology at the University of Pretoria. Stevens (in Davis, Klopper, Theron, & Nomoyi, 2002, p.5) states that "a violent crime is any action in which violence or threat of violence or physical injury is used". This definition is elaborated by Vetter and Silverman (in Davis et al., 2002, p.5) who describe violent crimes as "the use or threatened use of force to secure one's own end against the will of another that results, or can result, in the destruction or harm of person or property or in the deprivation of individual freedom".

Violent crimes included in this study are motor vehicle hijacking, armed robbery and assault.

## 1.5 Conclusion

Due to the South Africa's high crime rate many individuals may have experienced a traumatic event. These traumatic events may lead to the development of PTSD or Partial PTSD. This study explores the occurrence of residual, subclinical symptoms that individuals experience subsequent to surviving a violent crime. It also aims to describe similarities that exist between the research participants' accounts of such residual, subclinical symptoms in order to expand the current understanding of this occurrence. This is done by means of a phenomenological approach that utilises qualitative methodology and a case study design. The following chapters will focus on the subsequent aspects: exploring violent crimes and their effects in the South African

context; exploring the existing knowledge of acute stress disorder, posttraumatic stress disorder and partial posttraumatic stress disorder; using cognitive behavioural therapy in understanding posttraumatic stress disorder and partial posttraumatic stress disorder; discussing the research methodology used; exploring the results of the study; as well as making conclusions and recommendations based on these findings.

# CHAPTER 2:

# Exploring violent crimes and their effects

## 2.1 Introduction

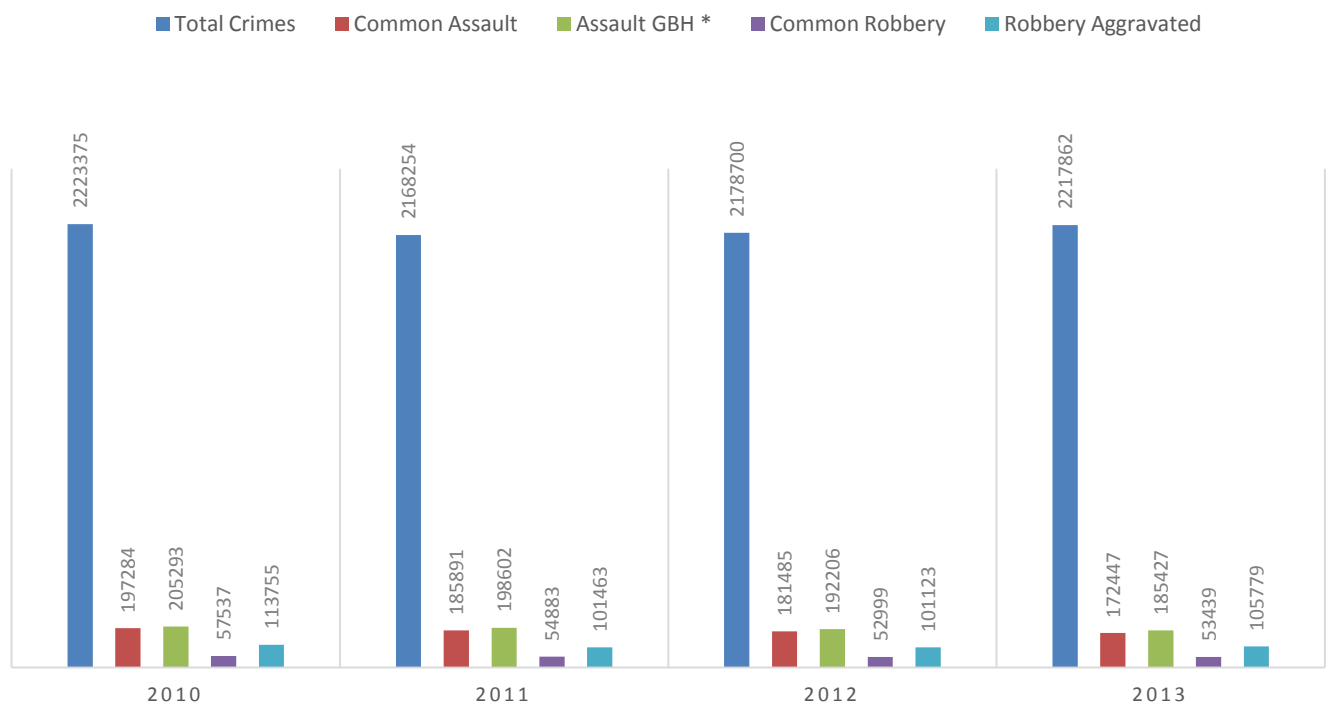
In South Africa people are, on a daily basis, incessantly bombarded with information about crime. Faull and Mphuthing (2009) are of the opinion that whether an individual is a direct victim of crime or not, almost everyone in South Africa suffers some form of crime-related trauma. Due to the importance of research on this matter the following section will briefly review the South African crime statistics for violent crimes as specified for this study, the effects that these crimes have on an individual's life as well as the lasting or residual effects of these crimes.

## 2.2 Violent crimes in the South African context

Faull and Mphuthing (2009) stated that in terms of recorded figures of the overall level of crime, crime in South Africa has declined since 2001. Kirsten and Bruce (2010) reported South Africa as one of the most violent countries in the world when comparing local crime statistics with international crime statistics. The South African President, Mr Jacob Zuma, in an address to Parliament, stated that South Africa has a greater problem with violent crime than any other country in the world. This statement was influenced by the, then, latest release on crime statistics which indicated a shocking rise in violent crimes (Pasco Risk Management, 2009).

A comparison of statistics of related crimes reflecting the periods 2010, 2011, 2012 and 2013 based on the latest crime statistics released by the SAPS in 2013 is depicted as follows:

**Figure 2.2.1 Statistics on relevant crimes 2010-2013**



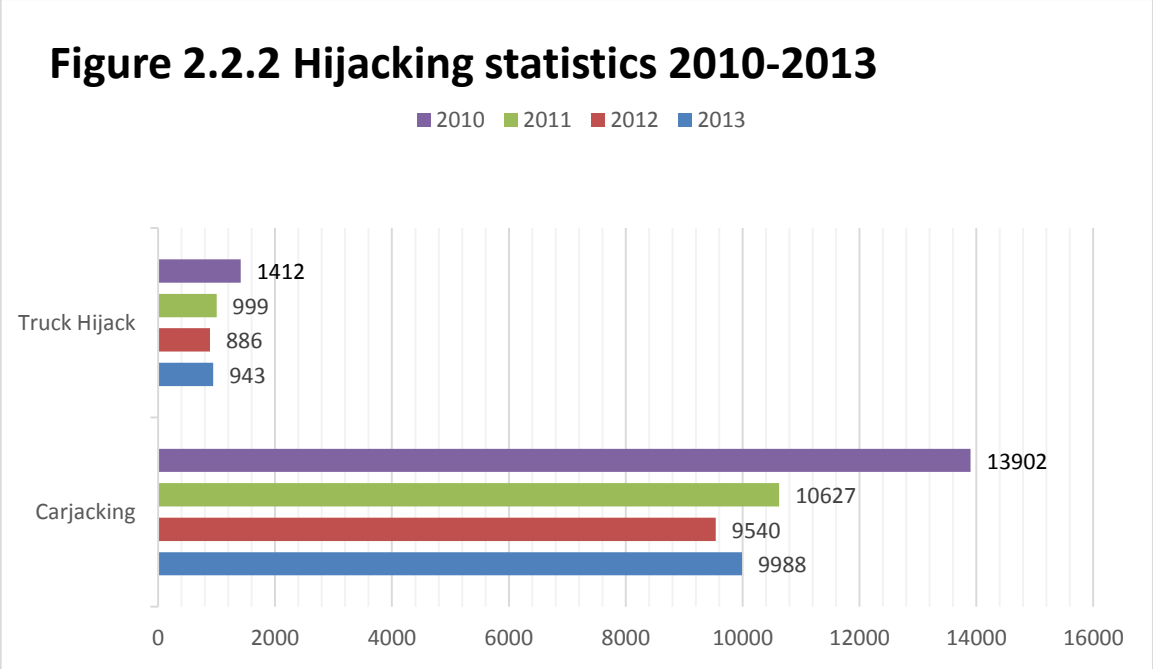

*Assault with the intent to do grievous bodily harm

Note: This figure reflects the crime statistics of the previous four years. It indicates that the total number of crimes have been steadily climbing since 2011. It also point out that common assault and assault with the intent to cause grievious bodily harm has declined over the past year. This is in direct contrast with common robbery and robbery aggravated which has increased during the past year.

---

These reflect an increase in the total number of crimes (2217862 crimes) committed in South Africa from the previous year (2178700 crimes).

According to the crime statistics carjacking and truck hijacking form part of the category 'Aggravated Robbery' and the statistics for the years 2010 to 2013 are as follows:




Note: This figure reflects the total number of truck and motor vehicle hijacking as reflected by the crime statistics of the past four years. It indicates that the total number of carjacking showed a steady decline between 2010 and 2012, but that it increased between 2012 and 2013.

Although the occurrence of robbery, motor vehicle hijacking and assault have shown a decrease in the reflected years, the number of these crimes that have been committed are still unacceptably high. Between 2012 and 2013 the following was reported: 172447 cases of common assault; 185427 cases of assault with the intent to inflict grievous bodily harm; 53439 cases of common robbery; 105779 cases of robbery with aggravating circumstances; as well as 9540 cases of carjacking (SAPS, 2013). The following factors contribute to South Africa's high crime rate: the existence of a subculture of violent behaviour and criminality; inequality, poverty, joblessness, social segregation and marginalisation; the vulnerability of young people as related to poor child rearing and poor socialisation; as well as perceptions and values related to violence and crime (Kirsten & Bruce, 2010).

It is important that the categories of crimes be seen in context. Newham (2008, p.7) reported that the definition of 'robbery aggravating' included '… all reported cases where a direct threat or use of violence occurred as a means to illegally acquire cash or goods …". This definition includes residential robbery (internationally referred to as home invasion), business robbery, vehicle hijacking, truck hijacking, bank robberies as well as cash-in-transit heists. In South Africa residential robberies,

business robberies and hijackings are collectively referred to as the 'Trio Crimes' and were given priority status by the government in the Gauteng Safety Strategy 2006-2014 because of the extent to which they contribute to public fear and anxiety about crime. The nature of the Trio Crimes are of particular concern as they occur indiscriminately and in places where one would expect to feel safe, such as at home, at work, or while travelling. This contributes to the rationale that it increases the level of trauma experienced by the victims (Newham, 2009).

After discussions with police officials and researchers with knowledge of Trio Crimes, Newham (2009) found that the perpetrators of these crimes were relatively well organised and their attacks well planned and executed. Most perpetrators were repeat offenders and had typically progressed from petty crime to more serious offences. Newham believes that the main purpose behind targeting residences, businesses or vehicles is the perception that a single unexpected attack would yield greater value in stolen goods and cash and by overpowering victims and using the threat of torture and/or death, perpetrators can obtain information revealing hiding places or combinations of safes where valuables and weapons are kept.

Newham (2008) stated that the primary objective of perpetrators of residential robberies is to steal a victim's property and leave the premises as soon as possible. He believes that although the fear experienced by victims of residential robberies who are subject to direct violence is real, in reality, the vast majority of victims are left mostly unharmed. However, in a small percentage of residential robberies, other crimes may be committed in conjunction with the robbery; these include murder (in 2% of cases), attempted murder (in 9% of cases), rape (in 4% of cases) as well as some form of injury (in 13% of cases). This contributes to the escalation of the level of trauma experienced. The mere threat of these additional inflictions of injury during the crime proved to also cause an increase in the level of trauma experienced by the victims.

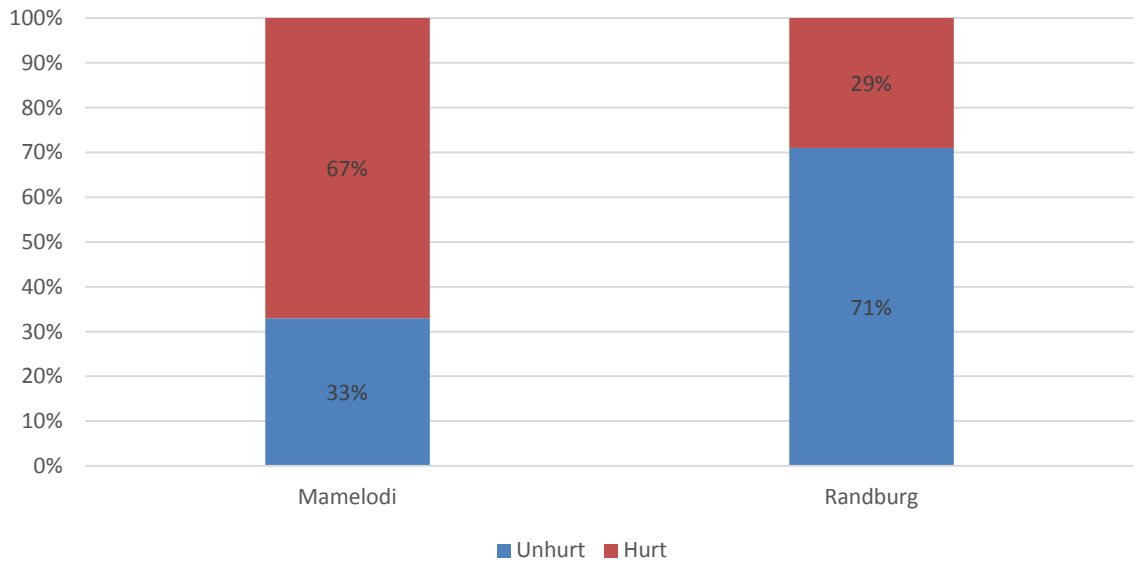
## 2.3 The effects of violent crimes

The effects of violent crimes are all-encompassing and manifests in the victims' financial, physical, emotional and social facets of life. The victim's support system of

family and friends, as well as the greater community that the individual resides in are also affected by the crime.

The type of crime committed, weapons used in the attack, the number of perpetrators, the degree of resistance offered by the victim, as well as the location of the attack is related to the occurrence and nature of physical injuries experienced. Research to prove that the location of crimes can be related to injuries experienced was conducted by the CSVR (2007). They compared 532 closed dockets of cases of serious violent crime conducted in Randburg and Mamelodi. This showed that 33% of victims in Mamelodi went without physical injury compared to 71% in Randburg.

**Figure 2.3.1 Injuries sustained by crime victims**




Note: This figure reflects the number of individuals who were injured during a serious violent crime, indicating that location can play a role in the amount of cases where physical injury occurs. In 29% of cases in Randburg individuals were injured during the commission of the crime, as compared to 67% of individuals in Mamelodi.

Other relevant factors confirmed by this study include:
Two-thirds of incidents of non-fatal firearm-injury were committed by a perpetrator unknown to the victim. Victims of vehicle hijackings often experience serious physical injury, which varies from gunshot wounds, bruises and abrasions, to

permanent damage to the shoulder, back and head. Victims were also injured to the extent that they require hospitalisation and/or long-term medical treatment.

The CSVR (2007) also found that the psychological and emotional impact of crime varies according to the nature of the crime and the individual's personal circumstances, personality, age and financial situation. The majority of incidents of victimisation result in some form of psychological distress, the most severe form being PTSD. Andrews, Brewin, Rose, and Kirk (2000) are of the opinion that both anger and shame play a crucial role in the phenomenology of crime-related posttraumatic stress disorder and that shame contributes to the following course of symptoms. Kilpatrick and Acierno (2003) believe that the effect of crime does not only include PTSD, but also depression, substance abuse and symptoms of anxiety. They confirm the study of Andrews et al. (2000) that shame is present but added the manifestation of feelings of guilt, fear and social withdrawal. According to the CSVR (2007) 73% of robbery victims surveyed indicated that they have changed their behaviour after the incident of crime in order to prevent further victimisation while 50% of the victims of assaults indicated that they have changed their behaviour in order to avoid further victimisation. Robbery victims' changes to behaviour include, but are not limited to, avoidance of perceived dangerous locations, increased vigilance and intensified security at their properties. It was found that 17% of respondents displayed signs of withdrawal and stopped going out altogether.

Studies have also proven that an individuals' reactions to a specific type of crime manifests in similar patterns. For example, victims of an armed robbery, confronted by armed and aggressive strangers whose intention is to threaten with violence and steal possessions, may feel deeply traumatised (Newham, 2008) and experience feelings of intrusion and insecurity (CSVR, 2007). Victims of an assault may experience feelings of anger, uneasiness, confusion, fear, shivering, an inability to perform ordinary tasks, as well as apathy (Shepherd, 1988). Lastly, victims of hijacking may experience feelings of shock, disbelief, confusion, helplessness and powerlessness (CSVR, 2007).

Multiple victimisations contribute and complicate impact on the victim as it may become impossible for the victim to distinguish between separate crime incidents, leading to an impoverished quality of life (CSVR, 2007).

As mentioned earlier, violent crimes do not only have an impact on the victim, but can also impact the victim's family members, their social group as well as society as a whole. Farrall and Gadd (2004) suggested that fear, caused by violent crimes, is widespread amongst members of westernised societies and that this fear can outweigh fear of loss of job, illness, road accidents and debt. According to the CSVR (2007) the awareness of crime and feelings of safety can affect the way individuals behave, socialise and perform business and may affect the way people conduct their day-to-day activities as they may start to avoid certain areas, forbid their children from going to certain areas and not partake in certain activities, like riding a bus. This can, in turn, disrupt the functioning of institutions such as schools and businesses, and feeds into the fear and distrust of others, whether they are neighbours, acquaintances or strangers, thereby reinforcing existing societal dysfunctions and contributing to reduced social contact between people of different groups.

## 2.4 Conclusion

Violent crimes are an on-going problem in South Africa, affecting people of all ages, races and social classes. The effects of these crimes are indiscriminate, affecting individuals on a financial, physical, psychological, social and communal level. Knowing how these crimes affect individuals can better equip mental health professionals to understand and treat individuals following such an experience.

# CHAPTER 3:

# Exploring existing knowledge of acute stress disorder, posttraumatic stress disorder and partial posttraumatic stress disorder

## 3.1 Introduction

Acute stress disorder (ASD) and posttraumatic stress disorder (PTSD) are psychological responses that develop subsequent to the direct or indirect exposure of a traumatic event, such as natural disasters, war, motor vehicle accidents as well as various types of crimes, including, but not limited to, assault, sexual abuse, physical abuse, motor vehicle hijackings and robberies. This study focuses on the development of subclinical symptoms which do not meet the criteria of posttraumatic stress disorder but still has a significant impact on the lives of those subjected to a single traumatic event of violent crime, specifically assault, armed robbery and motor vehicle hijacking. This condition has been described as 'Partial posttraumatic stress disorder' (Mylle and Maes, 2004), 'Subsyndromal posttraumatic stress disorder' (Pietrzak, Goldstein, Malley, Johnson, & Southwick, 2009) and 'Subthreshold posttraumatic stress disorder' (Cukor, Wyka, Jayasinghe, & Difede, 2010; Yarvis & Schiess, 2008), depending on the author's view and restrictions set in their definitions. In this chapter we will explore the characteristics of acute stress disorder, posttraumatic stress disorder, as well as partial posttraumatic stress disorder (including subsyndromal and subthreshold posttraumatic stress disorder), factors that influence the development of these disorders and how they affect individuals.

## 3.2 Acute stress disorder

Bryant and Harvey (in Hansen, Lasgaard, & Elklit, 2013) claimed that the diagnoses of acute stress disorder was introduced into the DSM-IV with two purposes. Firstly, it was used to recognise posttraumatic stress reactions presented within the first month following a traumatic experience. Secondly, the diagnosis of acute stress disorder was used to recognize individuals who were at risk of developing PTSD.

The APA (2000) describes the essential features of acute stress disorder as the development of:

> characteristic anxiety, dissociative, and other symptoms that occur within one month after exposure to an extremely traumatic stressor (Criterion A) … Either while experiencing the traumatic event or after the event, the individual has at least three of the following dissociative symptoms: a subjective sense of numbing, detachment, or absence of emotional responsiveness; a reduction in awareness of his or her surroundings; derealisation; depersonalisation; or dissociative amnesia (Criterion B). Following the trauma, the traumatic event is persistently re-experienced (Criterion C), and the individual displays marked avoidance of stimuli that may arouse recollections of the trauma (Criterion D) and has marked symptoms of anxiety or decreased arousal (Criterion E). The symptoms must cause clinically significant distress, significantly interfere with normal functioning, or impair the individual's ability to pursue necessary tasks (Criterion F). The disturbance lasts for a minimum of two days and a maximum of four weeks after the traumatic event (Criterion G)... (APA, 2000, p.469).

As mentioned earlier, acute stress disorder has long been seen as the forerunner for posttraumatic stress disorder. Brewin, Andrews, and Rose (2003) found that the diagnosis of PTSD is usually preceded by the diagnosis of acute stress disorder six months earlier. Classen, Koopman, Hales, and Spiegel (1998), supported the latter and stated that acute stress symptoms were found to be an accurate predictor of an individual's posttraumatic stress symptoms seven to 10 months after a traumatic event.

Bryant, Sackville, Dang, Moulds, and Guthrie (1999) found that the diagnosis of acute stress disorder permits an early identification of trauma survivors who may not recover naturally from the adverse effects of their traumatic experience and are in jeopardy of developing chronic posttraumatic stress disorder. Hansen and Elklit (2013) suggested that the degree of severity of the acute stress disorder is a stronger predictor of PTSD than just the diagnosis of acute stress disorder. In a study concerning the development of acute stress disorder subsequent to bank robberies, Hansen and Elklit (2011) suggested that the severity of acute stress disorder was

related to exposure to trauma and major life changes prior to the bank robberies and perceived helplessness and the individual feeling that their life was in danger during the bank robbery. They also noted that an individual's perceived safety was the prime predictor of severity of acute stress disorder. They claimed that neither the individual's age nor their exposure to previous bank robberies affected the severity of acute stress disorder. Elklit and Brink (2004) stated that individuals who met the dissociative, re-experiencing, avoidant and arousal criteria during acute stress disorder had a very high likelihood of developing PTSD. Brewin (in Bennett, Owen, Koutsakis, & Bisson, 2002) stated that early dissociation, which is a key aspect of acute stress disorder, has been found to be predictive of PTSD in victims of violent crimes. Birmes et al. (2003) went a step further and established that peritraumatic dissociation and acute stress symptoms are directly linked to PTSD symptoms and diagnosis. Irish, Fischer, Fallon, Spoonster, Sledjesk, and Delahanty (2011) supported the findings by Birmes et al. They, in addition to those findings, added that females are at higher risk than males for developing posttraumatic stress symptoms following exposure to trauma and added that this development is mediated by peritraumatic dissociation.

Ehring, Ehlers, Cleare, and Glucksman (2011, p.73) researched the biological responses following a traumatic incident and confirmed a link between psychological and psychobiological responses to trauma and the ensuing development of posttraumatic stress symptoms. Their research focused, but was not limited to, data-driven encoding, which was defined as "a predominant encoding of sensory impressions during the trauma and insufficient processing of the meaning of the situation." It indicated that compromised information processing during the trauma, specifically data-driven processing, led to low cortisol levels and the development of posttraumatic stress symptoms. This is due to the fact that this form of processing leads to poorly elaborated autobiographical memory traces of the traumatic experience as well as poor inhibition of unwanted cue-driven intrusive memories. This data supports the cognitive behavioural theories of posttraumatic stress symptoms and PTSD.

The following aspects contribute to the development of acute stress disorder following a physical assault: A childhood history of sexual and/or physical abuse,

feelings of hopelessness, feelings of being let down by others (Elklit & Brink, 2003); previous shock due to a traumatic experience of someone near and dear, threats during the assault, dissociation, an inability to express feelings and hypervigilance (Elklit & Brink (2004). Research by Hansen and Elklit (2011) illustrated that an individual's proximity to a bank robber was directly linked to the individual's perceived helplessness and feelings that their life was in danger. These factors indirectly contribute to the risk of developing acute stress disorder. Elklin and Brink (2003) however, explained that feelings of safety and the capability to articulate feelings reduced the probability of the development of acute stress disorder. In their arguments about the factors influencing the severity of the trauma Hansen and Elklit (2011) specifically argued that prior traumatic exposure (prior to the bank robberies) leads to a reduction in possibility of developing acute stress disorder as individuals may become desensitised to these stressful situations.

Devilly (2002, p.7) noted that "75% of individuals who went untreated for acute stress disorder will develop PTSD". These findings are in line with those made by Harvey and Bryant (in Bryant et al., 1999) who stated that approximately 80% of individuals who initially meet the criteria for acute stress disorder will suffer chronic posttraumatic stress disorder six months following the trauma. Research done by Bryant et al. (1999) suggests that the likelihood of developing PTSD depends on the trauma that was suffered as well as treatment that was received while an individual presented with acute stress symptoms. According to their findings between 78% and 82% of motor vehicle accident survivors who met the criteria for acute stress disorder could be diagnosed with posttraumatic stress disorder within six months following the trauma. They also found that where 94% of rape victims met the criteria for acute stress disorder, only 47% could receive a diagnosis of posttraumatic stress disorder three months following the crime.

In their research of motor vehicle accident survivors as well as nonsexual assault victims, Bryant et al. (1999) indicated that individuals who have undergone prolonged exposure plus anxiety management, when meeting the criteria for acute stress disorder, were less likely to develop posttraumatic stress disorder than individuals who only received supportive counselling. Research done by Bryant, Moulds, and Nixon (2003) support these findings, as they came to the conclusion that the early

provision of cognitive behaviour therapy in the initial month following the trauma has long-term benefits for people who are at risk of developing posttraumatic stress disorder.

Bryant et al. (1999) argued that these findings may be interpreted in terms of the information-processing theory of trauma, which states that recovery from trauma requires two important factors. Firstly, the activation of traumatic memories and, secondly, the modification of the threat-based beliefs to correct the fear networks that perpetuate posttraumatic stress disorder symptoms. They also claimed that their research presented evidence that intrusions symptoms can decline with time, but that avoidance behaviours can develop over time.

It is important to note that acute stress disorder does not always precede posttraumatic stress disorder, but it should rather be seen as an indicator, for treating professionals, that the individual is in need of assistance. Bryant et al. (1999) were of the opinion that whereas early intervention has a strong potential to prevent posttraumatic stress disorder, those individuals who are most distressed may not be responsive to early intervention.

## 3.3 Posttraumatic stress disorder

When looking at the diagnosis of PTSD itself, Rosenbaum (2004) claimed that no other psychiatric category has undergone as many alterations and permutations as PTSD since it was introduced into the official classification of psychiatric disorders in the DSM-III in 1980.

According to the APA (2000), PTSD entails the development of:

> characteristic symptoms subsequent to exposure to an extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or witnessing an event that involves death, injury, or threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or close associate (Criterion A1). The person's response to the event must

> involve intense fear, helplessness, or horror … (Criterion A2). The characteristic symptom resulting from the exposure to the extreme trauma include persistent re-experiencing of the traumatic event (Criterion B), persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (Criterion C), and persistent symptoms of increased arousal (Criterion D). The full symptom picture must be present for more than 1 month (Criterion E), and the disturbance must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning (Criterion F). (APA, 2000, p.463).

In May of 2013 the DSM-5 was released, which included changes to the diagnostic criteria for PTSD. Although it came out subsequent to the researcher commencing this research project and will not be utilised for the purpose of this study, the researcher found it important to note the revisions made to the diagnosis of PTSD. Firstly, PTSD as well as acute stress disorder has moved from the class of anxiety disorders into a new class of trauma and stressor-related disorders. Secondly, a few alterations have been made to the symptoms associated with PTSD. The three clusters of DSM-IV-TR symptoms are now divided into four clusters in the DSM-5 and include intrusion, avoidance, negative alterations in cognitions and mood, as well as alterations in arousal and reactivity. Three new symptoms were added to the diagnosis of PTSD. In the new Criteria C, consisting of negative alterations in cognitions and mood, persistent and distorted blame of self and others as well as a persistent negative emotional state was added. To Criteria D, namely alterations in arousal and reactivity, the symptom of reckless or destructive behaviour was added. Criterion A2, that required fear, helplessness or horror right after the trauma, was removed and a clinical subtype “with dissociative symptoms” was added and is applicable to individuals who experience depersonalisation and derealisation in addition to PTSD. An additional criteria was included for children ages six or younger (APA, 2013).

Although it is not the focus of or included in this study it is still important to acknowledge the prevalence of Axis I comorbidity with the diagnosis of PTSD. Research by Pietrzak, Goldstein, Southwick, and Grant (2011) found that individuals who have been diagnosed with PTSD may have elevated lifetime rates of mood-, anxiety-, and substance use disorders as well as suicide attempts. Hauffa et al. (2011)

stated that depressive syndromes and somatisation syndrome were, respectively, present in a third of their sample of individuals with a diagnosis of PTSD. In their study Leskin, Woorward, Young, and Sheikh (2002) explained that individuals with PTSD with comorbid panic disorder commonly complain of sleep-related problems which appear uniquely to panic, rather than other general anxiety disorders or depression. In a South African study by Watt et al. (2012) it was determined that there is a strong relationship between traumatic exposure and increase of alcoholic drinking which was largely mediated by PTSD symptoms. Similarly, Van Zyl, Oosthuizen, and Seedat (2008) found that patients treated in therapeutic wards for anxiety and mood disorders are frequently under-diagnosed with PTSD. They also found a co-morbidity of undiagnosed PTSD and substance abuse, such as cannabis usage. They ascribed this finding due to two factors. Firstly, individuals with undiagnosed PTSD may self-medicate their PTSD symptoms by using cannabis. Secondly, they claimed that individuals who use cannabis are more inclined to develop posttraumatic stress disorder when they are exposed to trauma.

Marshall et al. (2001) explained that there may be several possible interpretations of the high rates of comorbidity in PTSD. Firstly, the psychiatric disorders may have preceded the traumatic event, which then leads to a greater vulnerability for developing PTSD. Secondly, the comorbid anxiety- and affective disorders may be secondary to the traumatic event and PTSD. Lastly, the number of times an individual has been exposed to traumatic events has a direct correlation to the differences in the manifestation of comorbidity between individuals with and those without a psychiatric illness. They believed that individuals who have been exposed to more severe and/or recurrent traumatic experiences may suffer with greater comorbidity.

It is important to consider other aspects that contribute towards the development of posttraumatic stress disorder. These risk factors can include demographic variables, such as being a female (Elwood in Maack, Tull, & Gratz, 2011) or contextual risk factors, such as those explored by Brewin, Andrews ,and Valentine (in Price, 2007). They noted that there are certain predisposing variables to developing PTSD in response to trauma, including childhood trauma as well as neurotic personality traits. Breslau (in Mellman et al., 2001) added that an individual with past personal or familial depression and anxiety disorders are at risk for the development of

posttraumatic stress disorder. Elwood (in Maack, Tull & Gratz, 2012) believed that cognitive risk factors for the development of PTSD included anxiety sensitivity. Price (2007) stated that cognitive theories of PTSD allude to certain individuals being more predisposed to developing the disorder due to the presence of significant maladaptive defences or core schemas in the individual's personality. Foa and Rothbaum (in Price, 2007) elaborated that there are two types of negative schema repertoires which may predispose individuals to developing PTSD symptomology. The first focuses on the world as being an essentially perilous place and the second revolves around cognitions that the individual is incompetent. Silverstein (in Price, 2007) found that combat veterans suffering from PTSD exhibited more maladaptive or immature ego defences. Cockram, Drummond, and Lee (2010) agreed with this statement and suggested that early maladaptive schemas play a crucial role in the development and maintenance of PTSD.

Various factors can mitigate or contribute to the development of PTSD following exposure to trauma, for example Berger et al. (2007) found that males with PTSD were more likely to be unmarried. Examining individuals who present with symptoms of PTSD showed that social relationships play an important role before and during the development of this disorder. According to Stephens and Long (1999) traumatic experiences were positively related to PTSD, but this relationship was significantly weakened if there was greater social support from peers or more positive attitudes towards expressing emotions. These findings were supported by Brewin, Andrews and Valentine (2000) who confirmed that the lack of social support is a consistent factor in predicting the development of posttraumatic stress disorder. Eriksson, Vande Kemp, Gorsuch, Hoke, and Foy (2001) are in agreement with these previous findings and illustrated that the variance in PTSD severity can be related to the level of or lack of interaction between social support and the experience of a threat to one's life. Williams (in Stephens & Long, 1999) is of the opinion that sharing information about the traumatic experience with individuals who have experienced similar events is particularly effective. The abovementioned findings positively correlate with the information-processing theories of PTSD, which believe that social support is a mitigating feature in the development of posttraumatic symptomology. By sharing the traumatic experience with family and friends the individual is able to form new cognitive schemas or revise their existing schemas (Stephens & Long, 1999).

Byrne and Riggs (in Monson, Rodriguez, & Warner, 2005) argued that individuals who have been diagnosed with PTSD may present with a myriad of intimate relationship problems, including, but not limited to, two to three times higher likelihood to divorce, up to three times greater possibility of the individual becoming, firstly the aggressor in intimate violence, secondly experiencing diminished intimacy and lastly reduced relationship satisfaction. The study by Monson et al. (2005) therefore emphasised the importance of interventions that maximise social support as well as inclusion of intimate partners in PTSD treatments.

Research of victims of violent crimes by Brewin, Andrews, and Rose (2000) illustrated that the experience of extreme fear, horror and helplessness at the time of the trauma strongly predicted the development of PTSD, as it does in acute stress disorder discussed earlier. According to Bennett, Owen, Koutsakis, and Bisson (2002) two personality constructs can contribute to the development of PTSD. The first is negative affect. The initial information that is encoding of the traumatic event, by individuals high in negative affect, is likely to be more emotional, pessimistic and threatening than individuals without these characteristics. When explored through the dual representation theory of PTSD, when these individuals experience subsequent flashbacks, brought on by external triggers through the activation of situationally accessible memories, they are prone to be emotionally charged and fear-provoking. Negative affect may also influence the occurrence of verbally accessible memories, as individuals who have negative affect ruminate on topics that concern them, which may provoke the activation of situationally accessible memories that take the form of flashbacks. The second personality construct that can contribute to the development of PTSD is alexithymia. Bennett et al. (2002, p.491) defined it as “characterised as a paucity of emotional experience and awareness, with an associated poverty of imagination and a tendency to focus upon the tangible and mundane; in particular, the physical symptoms of emotional responses.” Researchers, such as Fukunishi, Sasaki, Chishima, Anze, and Saijo (in Bennett et al., 2002) confirmed a link between the evasion and numbing symptoms of posttraumatic stress disorder and alexithymia. In terms of the dual representation theory of PTSD, alexithymia may restrain the processing of emotional information into the overall cognitive schemas, through the

situationally accessible memories, and extend the duration of posttraumatic stress symptoms.

Paunović and Öst (2004) stated that PTSD has been associated with several incidences of deteriorated functioning. They elaborated by stating that PTSD was related to impairments in role functioning, subjective well-being, self-reported physical health status, current physical functioning and carrying out acts of interpersonal violence. Individuals who suffer from posttraumatic stress disorder are also more inclined to report marital, parental and family-adjustment difficulties than individuals who do not exhibit PTSD symptomology. Those diagnosed with PTSD also show a deteriorated self-perceived quality of life. Research by Baranyi et al. (2010) confirmed the preceding statement by illustrating that severely injured accident victims faced a risk of posttraumatic stress disorder as well as impairments in health-related quality of life 12 months following the incident.

Research by Schweizer and Dalgleish (2011) focused on "working memory capacity" in individuals who have been diagnosed with PTSD. In their study they used a definition provided by Dalgleish, Williams, Golden, Perkins, Barrett, and Watkins (in Schweizer & Dalgleish, 2011, p.498) which viewed working memory capacity as "the limited capacity to store task-critical information over short retention intervals while simultaneously processing other competing information, or engaging other cognitive operations." Their research indicated that individuals who have struggled with PTSD suffer significant working memory capacity impairments in emotionally charged contexts. This result was ascribed to the core characteristics of PTSD, namely, distracting emotionally-laden thoughts, feelings and images, which inhibit the functioning of routine cognitive operations. Due to these, and other, symptoms Deykin et al. (2001) claimed that individuals with PTSD only, or in combination with depression, leads to more frequent use of primary health care services. Belleville, Marchand, St-Hilaire, Martin, and Silva (2012) support the research by Deykin et al. and added that following a robbery, individuals with PTSD not only reported more medical visits, but also a higher absenteeism rate. Roy-Byrne et al. (2004) are therefore of the opinion that clinicians need to be aware of all of these persistent and long-term residual effects of trauma exposure and adapt the treatment accordingly.

Johnson, Zlotnick, and Zimmerman (2003) proposed that a partial remission specifier should be added to the diagnosis of PTSD. Their study of a subgroup of outpatients found that outpatients in partial remission displayed comparative levels of employment and social functioning with that of patients with PTSD, and over half of these patients had voluntarily requested therapeutic interventions.

## 3.4 Partial posttraumatic stress disorder

In exploring the symptoms of PTSD it becomes apparent that things may not be as clear-cut as we might have liked it to be. Various researchers reached contradictory conclusions on the reactions of victims to trauma. Stansfeld (2002, p.10) concluded that, "Exactly how lives are 'influenced' after a traumatic event remains uncertain". Cummings (in Moller, 2005) argued that one can expect crime victims to initially react negatively but to regain their normal happiness set-level in time, whereas Wemmers (in Moller, 2005) stated that severely traumatised victims might be slower to recover or may never regain their original personal disposition of happiness. Additionally, Young (in Moller, 2005) stated that when an individual survives a catastrophic crisis, they often experience stress reactions for years and that most of these long-term stress reactions are *normal* responses of people who have survived a traumatic event.

Views such as these have led to the study of other ways of viewing and defining symptoms experienced by individuals who have experienced a traumatic event, namely as partial PTSD or subthreshold PTSD. Various researchers, for example, Schützwohl and Maercker (1999), observed that individuals who do not meet the full set of diagnostic criteria for posttraumatic stress disorder may suffer from clinically significant symptoms thereof. Marshall et al. (2001) identified two reasons for the development of subthreshold PTSD. Firstly, they agreed with the development of only subthreshold symptoms and not full PTSD following the traumatic event. Secondly they claimed that subthreshold PTSD may result from partial recovery from the full PTSD syndrome.

Breslau, Lucia, and Davis (2004) referred to the fact that the description of partial PTSD was initially used in relation to diagnoses of Vietnam veterans with subthreshold traumatic symptoms. This diagnosis has later been extended to include civilian victims of trauma. Blanchard, Hickling, Taylor, Loos, and Gerardi (in Schützwohl & Maercker, 1999) defined partial PTSD as a condition wherein the minimum number of symptoms for the re-experiencing criterion of PTSD is met, and either the avoidance criterion or the hyperarousal criterion for PTSD are included. According to Davidson and Foa (in Schützwohl & Maercker, 1999) it is important to choose what diagnostic criteria to include in a definition of partial PTSD, as it provides the basis for the individual diagnoses made, as well as epidemiological estimates of the prevalence of the disorder.

Mylle and Maes (2004) strongly argued for the existence of the phenomena of Subthreshold and Partial PTSD. Their recommendations set the following criteria: The symptoms displayed must fulfil Criterion F of PTSD, namely the disturbance creates considerable distress in social, occupation or other vital areas of functioning. If subthreshold or partial PTSD symptoms manifest they should be regarded as either a separate category of disorder or specified as PTSD subcategories, depending on which Criteria of PTSD are met. Individuals would consequently be diagnosed with Subsyndromal PTSD if they present with a number of symptoms below the threshold for criteria C for PTSD, namely, persistent evasion of stimuli related to the traumatic event and numbing of overall responsiveness, or Criteria D (constant symptoms of increased arousal). A diagnosis of partial PTSD should be made when individuals present without any symptom for one or more of Criteria B of PSTD (the feature symptom resultant from the exposure to the traumatic event include persistent reliving of the traumatic event), Criteria C (constant evasion of stimuli related to trauma and numbing of general responsiveness) and Criteria D (persistent symptoms of increased arousal). Symptom description was cited from the APA (2000, p.463).

Rosenbaum (2004) is of the opinion that partial PTSD can be equally as impairing for an individual's general health and social functioning as compared with complete PTSD. Research on ambulance workers by Berger et al. (2007) verified Rosenbaum's research by finding that ambulance workers with both PTSD and partial PTSD showed impairment in physical and psychological areas of functioning, which may

lead to numerous visits to medical facilities. Lai, Chang, Connor, Lee, and Davidson (2004) made similar conclusions in Taiwan where they found that individuals with either PTSD or partial PTSD showed high levels of psychological impairment. Stein, Walker, Hazen, and Forde (in Marshall et al., 2001) confirmed this by claiming that persons who meet the criteria for partial posttraumatic stress disorder reported impairments in their social, occupational and home functioning which was comparable to the impairment observed in individuals who meet the criteria for PTSD. Zlotnick, Franklin, and Zimmerman (2002) also documented that the level of social and work dysfunction displayed in subthreshold PTSD is comparable to those of full PTSD.

According to Sadock and Sadock (2003, p.624) "5-15% of individuals who have been a victim of a traumatic event may experience subclinical forms of PTSD". There has also been biological evidence proving that long lasting effects of trauma are present in individuals, such as research done by Solomon and Heide (2005). They discovered that "During the past 20 years, the development of brain imaging techniques and new biochemical approaches has led to increased understanding of the biological effects of psychological trauma ... We now understand that psychological trauma disrupts homeostasis and can cause both short- and long-term effects on many organs and systems of the body" (Solomon & Heide, 2005, p.51). These findings were also confirmed in a study following the course of partial PTSD over a three year period by Cokur, Wyka, Jayasinghe, and Difede (2010). They found that the impairment associated with partial PTSD is not only significant, but also longstanding, with 24% of subjects with partial PTSD at the beginning of the study still displaying symptoms three years later. In a study of the relationship between subsyndromal PTSD and delayed onset PTSD Carty, O'Donnell, and Creamer (2006) found that subthreshold diagnoses is a risk factor for delayed-onset posttraumatic stress disorder.

Marshall et al. (2001) found that subthreshold PTSD not only contributed to the individual's level of impairment, but also that comorbidity is commonly experienced and is an important factor in understanding the clinical impairments in subthreshold PTSD. They found that subthreshold PTSD can be associated with suicide ideation, anxiety disorders as well as major depressive disorders. These findings are similar to that of PTSD.

Marshall et al. (2001) argued that although subthreshold PTSD has been defined in several different ways, it is as common as full PTSD and is associated with substantial impairment. Research by Shiner, Bateman, Young-Xu, Zayed, Harmon, Pomerantz, and Watts (2012) illustrated that the symptoms of partial PTSD disappear significantly faster that symptoms associated with PTSD, indicating that individuals with partial PTSD may benefit from a different clinical approach.

## 3.5 Conclusion

When considering the effects that these violent crimes have on individuals, it is important to take note of Smith (in Macritchie, 2006, p. 16) who believes that, "The deepest wound violent criminals inflict is not the path of a knife or the imprint of a hand, it is a psychological assault". This psychological assault may present itself as symptoms which meet the criteria for acute stress disorder and/or posttraumatic stress disorder or show signs of partial posttraumatic stress disorder.

The fact that individuals suffering from PTSD seldom seek out assistance from health care professionals has been confirmed in numerous studies. This is also rings true for partial PTSD as is indicated by research by Grubaugh et al. (2005). They indicated that these individuals do not seek out assistance, despite the presence of accumulating mental health symptoms and impaired ability to function. This reconfirms the need to explore and describe the phenomenon of partial posttraumatic stress disorder in order to broader our understanding of this phenomenon.

# CHAPTER 4:

# Using cognitive behavioural therapy in the understanding of posttraumatic stress disorder and partial posttraumatic stress disorder

## 4.1 Introduction

A large number of research studies done on symptoms and treatment of ASD, PTSD and related symptoms, highlighted the value of cognitive therapy. This research will follow that trend and view PTSD and/or related symptoms from a cognitive viewpoint.

As was pointed out in Chapter 3, partial posttraumatic stress disorder has the same symptoms as PTSD, while the individual does not meet all of the criteria to receive the diagnosis of PTSD (Schützwohl & Maercker, 1999). Partial posttraumatic stress disorder also affects an individual in a similar manner as PTSD. Firstly, partial posttraumatic stress disorder affects the individual's ability to function in home-, work-related-, social- as well as other important areas of functioning (Lai et al., 2004). Partial posttraumatic stress disorder also displays symptoms of re-experiencing the trauma, avoidance and hyperarousal (Blanchard et al. in Schützwohl, & Maercker, 1999). The cognitive behavioural theory used to describe and explain PTSD can, therefore, also be used in the explanation for symptoms associated with partial posttraumatic stress disorder.

Cahill, Rothbaum, Resick, and Follette (2009) believe that earlier therapies for PTSD focused on Mowrer's two factor theory of conditioned fear and operant avoidance. González-Prendes and Resko (2012) believes that Mowrer's two factor theory is one of the original attempts that presents a behavioural account for the attainment and preservation of fear that is associated with PTSD. Mowrer claimed that emotions are learned through classical and operant conditioning; this forms the basis of the learning theory. Brewin, Dalgleish, and Joseph (1996) stated that cognitive theories concerning posttraumatic stress disorder and its related symptoms fall into two distinct categories. The first is social-cognitive theories, as proposed by Horowitz and Janoff-Bulman,

who are of the opinion that an individual's emotional processing is activated by the discrepancy between their view of the world and the trauma they experienced. The second cognitive theory is the information-processing theory as suggested by Foa. This theory accepts that an individual's emotional processing starts as a result of a cue, for example a traumatic event. All of these theories will be discussed, as well as an attempt at their integration and the dual representation theory of posttraumatic stress disorder.

## 4.2 Learning theories

It is important to look at learning theories as they documented the initial efforts of clarification of emotions as it manifests in PTSD.

González-Prendes and Resko (2012) explained that learning theories focussing on PTSD describe how the fear and subsequent avoidance of the traumatic memory are conditioned, triggered, and ingrained. Consistent with this point of view, Wolpe (1990) claimed that detrimental fears may follow from exposure to a solitary traumatic event or from experiencing a series of distressing events. Bandura (in González-Prendes & Resko, 2012), however, noted that fears can be acquired in two ways. Firstly, fears may be acquired through classical conditioning association. Secondly, fears may be learned vicariously following a procedure of observation, i.e. the individual learns to react in a fearful manner by observing other individuals' frightened responses to a particular or situations or to events.

Mowrer (1956) suggested that emotions, specifically fear, hope, relief and disappointment are learned in the course of a two-part process that comprises of both classical conditioning and operant conditioning. Feather (1963) described this two-factor process by stating that fear develops through the process of classical conditioning when an individual is faced with a traumatic situation. The individual would then try to gain relief from the fear by actively avoiding the feared situation, event or object. This creates a secondary reinforcement of avoidance behaviour, i.e. operant conditioning. González-Prendes and Resko (2012) agreed with the abovementioned statements and added that within the classical conditioning

framework the individual may develop an irrational fear during a situation that is deemed unthreatening or neutral by others. For example, an individual may have been hijacked in their garage, and may thereafter begin to react to the neutral condition (being in the garage) with a similar intensity of fear related to the threatening event (the hijacking). They labelled this the process of generalisation. Generalisation may cause the fear and the associated avoidance to spread to all places and situations that remind the individual of the traumatic event. The individual then reacts towards these reminders or reflections of the traumatic event with the same fear responses and avoidant behaviours than they would when they are faced with the original stimulus. As a result the avoidant behaviours become operantly conditioned since it offers the individual with respite from the uncanny experiences of anxiety and fear.

Foa, Steketee, and Rothbaum (1989) reviewed Mowrer's two-stage theory and stated that this Stimulus-Response learning theories sufficiently described the experienced fear and subsequent avoidance that follows a traumatic event. This theory also accounts for the greater generalisation as compared to phobias. They, however, argued that these theories neither account for the other symptom associated with PTSD, nor do they adequately incorporate meaning concepts, which are central to PTSD. Foa and Hembree (2004) agreed that the conventional learning theories adequately describe the process of developing fear as well as process of avoidance. Conversely they noted that the learning theories do not explain the full spectrum of PTSD symptoms. González-Prendes and Resko (2012) added that learning theories do not account for the generalisation of fear across dissimilar situations. Moreover, they do not include the beliefs, thoughts, judgement, and meanings that the individual attaches to the traumatic memory. These shortcomings lead Foa, Steketee, and Rothbaum (1989) to develop a theory that incorporates the meaning that individuals ascribe to events. They felt that this was necessary due to their belief that threats that individuals perceive as dangerous are better predictors of posttraumatic stress disorder than actual, experienced, threats. This theory is discussed below.

## 4.3 Information processing theories

Foa (in Brewin et al., 1996, p.674) developed an information-processing theory of PTSD that revolves around the formation of a "fear network of memory". According to her this system includes various kinds of information about the traumatic event. It includes information about the traumatic events; information regarding the individual's physical, behavioural and cognitive responses to the traumatic event; as well as interoceptive information that link the stimulus (or situation) and response (fear and avoidance). Foa and Kozak (1986) noted that reasonable explanations of fear and its reduction entail awareness to both the stimulus-response associations as well as their meanings. They explained that the fear network also incorporates the individual's meaning that they have ascribed to the event or stimulus. González-Prendes and Resko (2012, p.16) elaborated on this theory. They stated that the meaning that the individual ascribes to the memory is usually negative and may take the form of either a feeling of dangerousness or a catastrophic outcome. These include feelings that the individual may die or that they may react in a negative way, such as faint. These negative feelings hinders individual from facing the distressing memories, resulting in the ineffective processing of the cognitive, behavioural and emotional information that cause the negative emotions in the first place. As a result, the individual reacts to the traumatic memory with the same behavioural, emotional and cognitive responses that are related to the original traumatic event. The individual's fear structure is, according to González-Prendes and Resko (2012), fixated on the details of a specific traumatic event which has passed, but had not been effectively processed and dealt with.

Foa and Kozak (1986) found that when an individual is confronted with triggering stimuli, i.e. any reminders of the trauma, the fear network is activated which, in turn, causes information in the network to enter consciousness. Attempts to avoid or repress such activations subsequently lead to a group of avoidance symptoms. According to Foa and Kozak (1986) these avoidance symptoms include distraction strategies such as distorting the anxiety provoking images, concentrating on the non-threatening aspects of the situation and imagining that the individual is elsewhere. These cognitive strategies minimise the encoding of fear-relevant information and therefore

hinders the activation of fear. Foa and Jaycox (1999) elaborated that the re-experiencing of the traumatic event and subsequent avoidance the trauma information can maintain the symptoms associated with posttraumatic stress disorder.

Foa, Steketee, and Rothbaum (1989) argued that successful resolution of the trauma can only occur when the information in the fear network is incorporated with an individual's existing memory structures. Two aspects are involved in this process of incorporation. The first step in the process is the activation of the fear network. Foa, Riggs, Massie, and Yarczower (1995) explained that the fear network needs to be activated so that it may become accessible for modification. Foa and Kozak (1986) noted that the process of activation of the fear structure takes place through the process of exposure, that is, through the method of in vivo exposure and imaginal treatments. The second part of the process is the completion and modification of the traumatic memory. Foa and Kozak (1986) argued that the information within the fear network that is incomplete and incompatible with the existing maladaptive structure should become available to enable the overall memory structure to become modified to prompt a healthier response to the memory.

There are, however, factors that may impede the successful resolution of the traumatic memory. The following research supports this point of view.

Foa and Rothbaum (1998) noted that individuals who develop posttraumatic stress disorder usually have two skewed beliefs that are central to the way in which they view themselves and the world in which they live. Firstly, they believe that they may be incompetent. Secondly, they may view the world as a dangerous and threatening place. They further explained that a traumatic event can substantiate their viewpoint following the ordeal. These statements were supported by Dunmore, Clark, and Ehlers (2001) who noted that certain cognitive variables predicted the development and the severity of PTSD. These variables included the individual's cognitive processing styles of mental defeat, mental confusion and detachment during the traumatic event. They also included appraisals subsequent to the traumatic event, specifically the consideration that others might respond negatively towards the individual and the evaluation that their lives have been permanently changed. González-Prendes and Resko (2012, p.17) elaborated that cognitive factors related to the development and

maintenance of posttraumatic stress disorder fell within three categories. These included feelings related to the devaluation of the individual, e.g. “I am a loser”; “I am disgusting”. They also included beliefs about one’s safety, e.g. “There is no safe place”; “People have bad intentions”. Lastly, they included attitudes with regards to the world as a whole, e.g. “There is no justice in the world”. They further claimed that individuals who hold these beliefs would be more inclined to view traumatic events as being part of a world that is dangerous. These views, in turn, may result in the development of fear and subsequent avoidance in reaction to the unsafe world. González-Prendes and Resko (2012) believed that the individual’s view that they are incompetent may lessen when they are able to cope with challenging situations. An individual with a low sense of self-esteem may feel overwhelmed by the traumatic experience, as they may view themselves as unlikely to cope with the horrid memories of the traumatic event.

The information-processing theory places emphasis on social support and views it as a mitigating feature in the development of posttraumatic stress disorder. According to Stephens and Long (1999), the importance of social support is accounted for by the “working through” phase, which includes forming new cognitive schemas or revising existing schemas. Similarly, Horowitz (1986) claimed the process of working through includes talking about the trauma and its related emotions so that the experience can be assimilated. According to Thrasher, Power, Morant, Marks, and Dalgleish (2010) social support not only mitigates the development of PTSD, but also affects how well the individual responds to the treatment thereof. They found that individuals with poor social support receive less immediate therapeutic benefit than those with higher levels of support.

Foa’s theory greatly contributed to the cognitive understanding of posttraumatic stress disorder for various reasons. Firstly, Brewin et al. (1996) explained that Foa concentrated on factors such as predictability and controllability of the trauma, placing focus on the individual’s ascriptions and interpretations of the trauma. Secondly, they noted that Foa pointed out that successful information processing is dependent on integrating all the various stimulus-information taken in during trauma. This is significant as it points out the importance of social support as a vehicle for the provision of such information. This also emphasises the processes underlying the

success of exposure-based therapy for PTSD. González-Prendes and Resko (2012) believes that this theory provides an explanation of why emotional experiences carry on affecting an individual's behaviour, for extended periods following the traumatic event, which was initially related to the emotion.

It is, however, unclear whether the theory developed by Foa can account for the magnitude of symptomology associated with PTSD and related conditions, including denial and numbing. There is also little discussion of how an individual's existing models of the world are represented by networks and how the incorporation of new information within such models may take place or why fear network develop in some individuals but not in others (Brewin et al., 1996, p.675).

## 4.4 Social cognitive theories

When exploring posttraumatic stress disorder, Brewin et al. (1996) credited Horowitz with formulating the theory of stress-response syndrome. This theory is mainly concerned with the cognitive processing of traumatic information, for example accompanying ideas, thoughts, affects, images, and so forth. Horowitz (1976) argued that the main drive for such processing comes from a completion tendency, which is explained as the individual's tendency to include new data into the individual's current cognitive world view or schema. He further stated that the experience of a traumatic event may stun an individual or leave them crying. Thereafter they experience a period of emotion overload. During this period of emotion overload the individual's experiences, thoughts, and memories of the traumatic event cannot be reconciled with their existing schemata. Horowitz (in Edwards, 2005) gave two reasons why new information cannot be assimilated into the existing cognitive schemas. Firstly, existing models or schemas are constructed from past experiences. When a traumatic event takes place the new information about the individual's experiences cannot be integrated into their existing schemas. This is due to the unfamiliarity of the new information. Secondly, the novel information cannot be integrated into their existing schemas since the implications thereof are emotionally painful.

As a result, Horowitz (1986) claimed that psychological defence mechanisms, predominantly numbing or denial, are activated in order to keep the traumatic information from entering the individual's consciousness. However, completion tendency helps to maintain the information that is associated with the trauma, in active memory, causing it to intrude into an individual's consciousness. These intrusions may present as unwanted thoughts about the traumatic event, flashbacks or nightmares. This tug-of-war between completion tendency and psychological defence mechanisms causes the person to fluctuate between phases of intrusions and denial or numbing, all while he or she progressively integrates the traumatic information with long-standing schematic representations of the world. According to Horowitz (1986) as well as Sadock and Sadock (2003) the result of failed information processing is having somewhat processed trauma related information. This information will remain in active memory and may never be fully integrated into existing cognitive schemas, which may lead to chronic posttraumatic reactions.

Brewin et al. (1996) are of the opinion that Horowitz has developed a comprehensive theory of stress response as his argument for the processes underlying completing, intrusion, and denial has potential for explaining posttraumatic phenomenology. They argued that Horowitz's theory clearly indicates ways in which normal reactions to traumatic events may become chronic and pathological. Brewin et al. (1996) claimed that Horowitz's theory has a variety of limitations. Firstly, he does not explain why various people who are faced with the same traumatic experience display differing symptoms. Secondly, Horowitz's theory does not make provision for the epidemiological data regarding late onset of posttraumatic symptoms. Thirdly, they disagreed with the assumption that all individuals experience an initial period of denial, followed by oscillations between denial and intrusion. Finally, they claimed that Horowitz gives little attention to an individual's ascription and understanding of a trauma and the way that these may affect how they deal with their experiences.

## 4.5 A more comprehensive theory of posttraumatic stress disorder

In an attempt to create a more comprehensive cognitive processing theory for posttraumatic symptoms, Creamer, Burgess, and Pattison (1992) integrated existing

cognitive models and developed a combination and reconceptualisation of existing cognitive behavioural formulations of PTSD. In this theory they combined the central ideas of Horowitz with the network design of Foa. Creamer et al.'s theory proposed that the fear network must be activated for recovery to take place, a system which they referred to as network resolution processing. This concept has similarities to Horowitz's completion tendency, but Creamer et al. (1992) differed with Horowitz in the details of such resolution and completion. Horowitz (1986) suggested an initial period of denial followed by fluctuations in experiences of denial-numbing and intrusion subsequent to the experience of trauma. In contrast with this Creamer et al. (1992) argued that the individual will experience an initial period of intrusions, due to the activation of the fear network and the individual will try and cope with these intrusions by using a range of defensive and avoidant strategies. Creamer et al. were of the opinion that the extent of the initial intrusive symptomology may be used as an index of the degree of network resolution processing that is occurring. Subsequently, high levels of initial intrusions are a predictor of a successful recovery.

Brewin et al. (1996) believe that Creamer et al.'s theory is significant in that it is based on longitudinal data and makes clear predictions about expected outcomes following a traumatic event. However, this theory is also believed to have a number of deficiencies. Firstly, Brewin et al. (1996) argues that the theory has limited explanatory value as it may be seen as an attempt at presenting correlation data in a loose theoretical framework. Secondly, the theory does not provide an explanation as to why only some individuals develop posttraumatic stress symptoms. It also does not indicate how social support may influence an individual's ascription and understanding of the trauma.

## 4.6 The dual representation theory of posttraumatic stress disorder

Harvey and Bryant (1999) noted that the interconnected organisation of traumatic memories is essential for the processing and relieving of posttraumatic symptomology. However, they stated that traumatic memories are usually vivid and filled with detail in individuals with posttraumatic stress disorder. However, these memories are also inclined to be disorganised and full of gaps. Brewin (2001)

explained that this takes place because, within a traumatic situation, emotion will enhance memory for essential information while decreasing memory for peripheral information.

Brewin (2001) claimed that the high intensity of emotions initiate strong conditioned reactions, while weakening cognisant memory processes. Cahill and McGaugh (1998) noted that the amygdala is involved is the formation of enhanced declarative memory for events that were emotionally arousing. They explained this process by indicating that memory is improved by the secretion of the specific adrenal hormones, namely adrenaline and cortisol. They continued that the amygdaloid system, together with the sympathetic nervous system, make up an organised mechanism that ensures that emotional situations are stored in an individual's memory. In situations of prolonged or severe stress the subsequent elevated levels of cortisol tend to weaken the performance of the hippocampus, which is a structure of the brain that is involved in memory. Consequently, this will negatively affect an individual's recall of the traumatic event (Metcalfe & Jacobs, 1998). The effects of stress on memory can therefore be seen as a curvilinear process, in which little stress enhances the formation of memory. This process will show a decrease in memory formation in times of severe stress or prolonged stress.

Usually, individuals with posttraumatic stress disorder can give a descriptive explanation of the trauma. They can also adjust their level of given facts in accordance to the demands of the situation. For example, they may give little detail while explaining the experience to casual acquaintances, they may give a higher account when giving information to the police, and they may disclose a lot of information when recalling the event to close friends. The individual's narrative story indicates their conscious memory of the traumatic event and contains the details that were processed sufficiently and stored in their long-term memory. This story also provides the foundation for efforts to replay the traumatic event during which the individual would look for alternative outcomes, evaluate their own behaviour and to allocate blame for the event. The individual may bring their conscious memories into awareness by recollecting it from memory. Memories may also pass into awareness unwillingly. Brewin (2001) is of the opinion that this takes place when an individual

is confronted by external reminders of the traumatic event, or when they are faced with images, thoughts or words that are associated to the trauma (Brewin, 2001).

Brewin (2001) described flashbacks as another characteristic symptom of PTSD. A flashback is described as the occurrence of reexperiencing the trauma. They are short lived and may last for just a few seconds or just a few minutes. A flashback normally contains sensory detail that includes vivid description, smells and/or sounds as well as all other information gathered from an individual's senses. Reynolds and Brewin (1999) and Brewin (2001) noted that flashbacks are so emotionally charged that it creates a misrepresentation in the individual's sense of time. This leaves the individual with the impression that the event seems to be happening in the present. Flashbacks are triggered involuntarily, usually by exposure to internal or external cues of the trauma. Consequently, individuals who suffer from PTSD often become experts at avoiding circumstances that are prone to generate flashbacks. They may also find a way to speak about their trauma, which will minimise their chances of reexperiencing the trauma.

In doing research with individuals who suffer from PTSD, Hellawell and Brewin (in Brewin, 2001) noted that these individuals readily recognise descriptions of reliving and narrative memory. When asked to present a detailed, written account of their traumatic event, they can, in retrospect, differentiate between the points in their story during which they experienced flashbacks and the points during which they did not. Trauma researchers, such as Horowitz and Reinbord (1992) have also noticed how a memory may evoke emotions in various ways. They believed that memory may be consciously presented with a modest amount of felt emotion. In contrast, memory may also be consciously presented with intense emotional responses. These explanations led Brewin et al. (1996) to conclude that individuals with posttraumatic stress disorder reveal two distinctive types of traumatic memory.

They proposed that narrative memory revealed the process of a 'verbally accessible memories' (VAM) system. This system is integrated with other autobiographical memories and it can intentionally be retrieved and progressively edited. Brewin et al. (1996) also stated that these memories of the traumatic event are developed from anxiety-mediated selective awareness and may be detailed, but fragmented.

Brewin et al. (1996) suggested that the second system, known as the 'situationally accessible memory' (SAM) system is non-conscious and that the memories are more elaborated. These memories cannot be intentionally accessed, but they can be called into awareness in the presence of internal and external stimuli related to the traumatic event. This may take the form of a flashback. Non-conscious processing is described as more comprehensive when compared to the more focused VAMs. They are also described as including implicit memories of sensory inputs as well as the motor- and physiological characteristics of the experience. When the situationally accessible memories are activated, they facilitate the detailed recreation of the event. The significance implicit in these detailed recreations may not correlate with the implicit meanings of the verbally accessible memories.

It is therefore significant to note that, as a rule, both verbally accessible memory systems and situationally accessible memory systems would include information about the trauma, thus securing two separate forms of emotional memory descriptions. Brewin et al. (1996) suggest that the drive towards resolving the discrepancy between former cognitive schemas and new information leads to emotional processing. This emotional processing takes place within the verbally accessible memory networks, but it may also activate situationally accessible memories, such as flashbacks, which supplies thorough information that is necessary for cognitive readjustment to the traumatic event. The cognitive efforts aimed at providing meaning, ascribing blame and contextualising the traumatic events in the greater cognitive schemas will lead to the integration of the novel information into the existing schemas. Consequently, this minimises negative emotions, it reinstates the sense of control, and leads to modification in the individual's outlook about the world and themselves.

## 4.7 Factors hindering successful trauma resolution

Several factors may hinder this process. Edwards (2005) stated that these factors include specific emotions experienced by a traumatised individual, dysfunctional beliefs held by the traumatised individual as well as avoidance strategies employed by the individual following the traumatic event.

### 4.7.1 Emotions

Certain emotions may bring about negative emotional reactions, which the individual would like to avoid. This avoidance hinders the individual's ability to incorporate novel information into existing cognitive schemas. Edwards (2005) illustrated that these problematic emotions include fear, disgust, shame, humiliation and anger, guilt and grief. The next section will briefly explore research done on the painful emotional states of fear, shame and anger.

FEAR: Recollections of traumas are usually accompanied by intense fear. This becomes problematic when fear becomes generalised and distorts the individual's experience. This will result in the individual not feeling safe anywhere and anticipating future threatening events. Warda and Bryant (in Edwards, 2005) noted that individuals with posttraumatic stress disorder misjudges their likelihood of experiencing negative events as well as the severe consequences that are related to these events.

SHAME: Lee, Scragg, and Turner (2001) argued that shame is problematic as it leads to the self to be devalued in a way that is damaging to the individual's identity. Edwards (2005) added that shame may result in the individual interpreting coping difficulties and intrusions as a sign of inadequacy and weakness. Shame is also related to the avoidance of thinking about the traumatic event.

ANGER: Anger, according to Edwards (2005), becomes challenging when it hinders the emotional processing of the traumatic event. This takes place in two opposing ways. Firstly, individuals may be unable to express what took place as well as their emotions during the event. Secondly, the individual may focus on anger by mulling over vengeance, which hinders constructive action.

Brewin and Holmes (2003) stated that it is imperative that individuals identify information of their trauma narrative that is associated with severe emotional distress. It is also important to recognize the exact emotions and the significance that the

individual ascribes to them. This is important as these meanings may bring about avoidant behaviour and should be addressed in therapy.

### 4.7.2 Dysfunctional beliefs

Complications in dealing with the negative experiences may be aggravated by an individual's dysfunctional and skewed beliefs. These dysfunctional beliefs may be about the symptoms experienced as part of PTSD. They may include thoughts by the individual that there is something wrong with them or that they may be judged by others for expressing negative emotions. These thoughts lead to anxiety and may bring about shame, which result in difficulties assimilating the traumatic event into the individual's existing cognitive schemas. Additional skewed beliefs trigger the severely intense emotions themselves. For example, generalised fear might be accompanied by the belief that you cannot be safe anywhere. This may lead to the individual displaying increased vigilance for signs of further trauma or showing selective attention to threatening cues that may increase the individual's feelings of anxiety and the frequency of intrusive memories. A different type of dysfunctional belief reflects the instantaneous experience of taking the negative emotions following the trauma and generalising it to all events in the future. Some examples of such thoughts may be: "This trauma has ruined my life" and "I am a different person since the trauma". These dysfunctional beliefs may then result in the individual losing motivation to rebuild his or her life. The last form of dysfunctional beliefs is entrenched in the individual's philosophical view of the world as well as their spiritual belief system, as the individual may interpret the traumatic event and/or the experience of PTSD symptoms as a punishment for not being able to stop the violent experience (Edwards, 2005, p.212).

### 4.7.3 Avoidance strategies

Behavioural, emotional and cognitive avoidance mechanisms or defences may be brought about in order to limit the negative effects of the various emotions a traumatised individual experiences.

Edwards (2005) explained that behavioural avoidance comprises of evading places or situations in which the trauma transpired, evading similar places or situations and avoiding cues associated with the traumatic event, for example sounds, smells and photographs. Behaviour avoidance is believed to be problematic, as evading stimuli related to the traumatic event may hinder the expansion of the individual's memory. It may also thwart the effort to habituate anxiety responses to trauma-related stimuli and averts the reassessment of over-inflated estimations of threats. Behavioural distractions, such as constantly cleaning the house or excessively focusing on work, may cause images and thoughts related to the trauma to be excluded from awareness. Behaviours such as social withdrawal lead to diminished social support, which prevents individuals from returning to a state of normal functioning and contributes to a vulnerability to alienation and depression.

Cognitive avoidance as described by Edwards (2005) includes all cognitive mechanisms that assist the individual in the removal of trauma-related beliefs and/or descriptions from awareness. Meichenbaum (in Edwards, 2005) explained that these avoidance strategies comprise of perturbing about minor events, negative and devalued self evaluations of the self as well as suppressing thoughts. Clark (2000) added cognitive distractions, such as focusing on alternative strain of thought. Edwards (2005) added that cogitations that take the form of vengeance and rumination about how the traumatic event may have been evaded also forms part of a cognitive avoidance mechanism. Ruminations about how the traumatic event may have been foiled do not address the individual's feelings of guilt and humiliation and distracts from the fact that the trauma had actually taken place. Research by Schönfeld, Böllinghaus, Böllinghaus, and Rief (2007) focused on individuals who have been assaulted and consequently developed PTSD. They discovered that individuals with PTSD retrieved general memories and had omissions when describing the traumatic event and believed that this was due to effortful suppression of trauma-related memories. Also focusing on this issue, Cougle, Smits, Lee, Powers, and Telch (2005) illustrated that suppression of threatening thoughts may be a common coping method that individuals use when they anticipate a threat. This may be applicable in individuals who experience dysfunctional beliefs, foreseeing another traumatic event.

Emotional avoidance strategies, as described by Edwards (2005), include substance use and/or abuse and individuals emotionally isolating themselves from the events of the traumatic situation. Ehlers and Clarke (2000) argued that behavioural-, cognitive- and emotional avoidance mechanisms are considered dysfunctional due to three reasons. Firstly, it increases the frequency of intrusions experienced by the traumatised individual. Secondly, it prevents the evidence against the dysfunctional beliefs that stimulates the negative affect that brings about avoidant strategies. Lastly, avoidant mechanisms prevent the elaboration of the traumatic memories.

## 4.8 Conclusion

Numerous psychological factors add to the increase and maintenance of PTSD due to the fact that they obstruct the individual's emotional and cognitive processing of the trauma. These psychological factors comprise of the negative and distressing emotions, including guilt, shame, anxiety and grief; dysfunctional cognitions; as well as avoidant actions on a behavioural, emotional and cognitive level (Edwards, 2005).

Numerous cognitive theories tried to explain the psychological factors and the phenomenon of PTSD. Learning theories focussing on PTSD describe how the action of fear and the subsequent avoidance of the distressing memories are activated, repeated and reinforced (González-Prendes & Resko, 2012). The social-cognitive theories emphasise the effect that the traumatic event has on the individual's life and the information-processing theories that focus on how information that is related to the traumatic event is illustrated in the individual's cognitive schema and how it is consequently processed (Brewin et al., 1996). Other theorists, such as Creamer (in Brewin et al., 1996) have tried to combine these theories in order to formulate a more comprehensive explanation for processes and symptoms associated with posttraumatic stress disorder and related symptoms, but this proved to have some shortcomings. According to Bennett, Owen, Koutsakis, and Bisson (2002) a comprehensive hypothesis of the development of posttraumatic stress disorder has been developed by Brewin. Brewin developed the dual representation theory of PTSD which noted that

the sensory information that an individual experiences is processed on a conscious and unconscious level.

These theories contributed to the conclusion that cognitive processing of a traumatic event has a direct impact on the symptoms displayed and therefore influences the diagnoses of acute stress disorder (ASD), posttraumatic stress disorder (PTSD) or partial posttraumatic stress syndrome (PPTSD). This statement is supported by Janoff-Bulman (1989) who also concluded that the symptoms of self-blame, denial, and intrusive, recurrent thoughts are due to inappropriate cognitive coping strategies as individuals struggle to assimilate their traumatic experience and/or changing their basic cognitive schema about themselves and their world. An individual's cognitive schemas as well as processing of traumatic information may influence the development of certain symptoms associated with posttraumatic stress reactions.

# CHAPTER 5:

# Research methodology

## 5.1 Introduction

Research methodology is the core factor of any research project. This provides the framework for the approach to the research, the formulation of aims and hypotheses as well as the research process that will be implemented. In this section we will explore these issues. Information is supplied to justify the choice of method used for data collection and analysis, the methodology for the assurance of the validity and reliability of this study, as well as the ethical issues to be taken into consideration.

## 5.2 The aim of the research

This research explores the world of individuals who have suffered a traumatic experience, specifically the violent crimes of assault, motor vehicle hijacking and armed robbery. By entering this world, the researcher focuses on the occurrence of residual, subclinical symptoms of PTSD that individuals experience subsequent to the specified violent crimes. By exploring trends in commonalities that exist between research participants' accounts of such residual, subclinical symptoms the research aims to describe these trends, enabling a common understanding and awareness of the longstanding effects that these experiences have on individuals. It is envisaged that the exploration of the occurrences of residual, subclinical symptoms will describe the phenomenon of partial posttraumatic stress disorder in order to create a common understanding of the phenomenon. Individuals suffering from partial PTSD may feel less isolated if they understand that there is a recognised label that can describe their experiences.

## 5.3 Problem statement

The problem statements for this study are as follows:

1. While extensive research has been done into the experiences of individuals with full blown PTSD, we still do not adequately understand the experiences of individuals with residual, subclinical symptoms.
2. The residual, subclinical symptoms of PTSD are extensive enough to affect an individual's life on a daily basis and may persist for years following the event and should therefore be adequately explored and understood.
3. Evidence of the lasting effects of crimes such as car hijacking, assault and armed robbery, which occur on a daily basis in South Africa, have not been sufficiently researched in comparison to crimes such as family violence and rape.

## 5.4 Phenomenological approach

The researcher decided to conduct this study through the use of a phenomenological approach. Giorgi and Giorgi (2008) noted that phenomenology seeks the meanings that comprise the phenomenon through investigating and analysing lived examples of the phenomenon.

Giorgi and Giorgi (2008) stated that whilst retrospective descriptions are often the source of phenomenological data, they are not the only source. The researcher agreed with this statement and attempted to gain ongoing descriptions by attempting to establish how the traumatic events still impacted on individual's lives. This will be done by using a qualitative methodology and a research design of case studies.

## 5.5 Motivation for using a qualitative research methodology

This research used qualitative methodology in order to explore the phenomenon of residual, subclinical symptoms following a traumatic experience, specifically the violent crimes of motor vehicle hijacking, assault and armed robbery. A qualitative methodology has been chosen for the reasons as justified in the following studies:

Jankowski and Wester (in Potter, 1996, p.7) held that the qualitative approach to research relies on the idea of "verstehen", which "refers to an understanding of the

meaning that people ascribe to their social situation and activities. Because people act on the basis of the meanings they attribute to themselves and others, the focus of qualitative social science is on everyday life and its significance as perceived by the participants". Elliot, Fischer, and Rennie (in Bryman, 2007) support this view and see the central purpose of qualitative research as contributing to a process of review and enrichment of understanding, rather than to validate earlier conclusions or hypotheses.

Qualitative research methodology, specifically through case studies, has been chosen for this study, as the focus is not on the exploration of how many people are affected by residual, subclinical experiences, but rather how these experiences manifest in the research participants' daily lives and how these experiences affect them, on an emotional as well as a behavioural level. The case study method is supported by semi-structured interviews as the approach to obtain the research data.

The limitations of qualitative research methods, in that the findings only reflect a very small sample of the population, are a known fact. The value of qualitative research in this study is that it contributes to insight into the existence of residual, subclinical symptoms in a South African context, where crime is a common occurrence.

According to Flick (2007) another concern in qualitative research is the issue of quality. In quantitative research this is achieved through standardisation of the research process. Flick believes that issues of control and limited standardisation are also important in qualitative research. These concerns were addressed by keeping the methodological features of the research constant. This was done by, firstly, requiring each research participant to complete a posttraumatic stress disorder checklist (PCL-S) to assess whether they meet the criterion for posttraumatic stress disorder. Participants who met the criteria for posttraumatic stress disorder were excluded from the study. Secondly, semi-structured interviews were conducted. This allowed for the approximate consistency of data collected, assisting in the comparative analysis of the data.

## 5.6 Research design

The phenomenon of residual, subclinical symptoms was studied by means of case study design. This choice is supported by Yin (in Corcoran, Walker, & Wals, 2004), in stating that case studies permit a researcher to reveal the multiplicity of factors which have interacted to produce the unique character of the entity that is the subject of the study. Case studies also represent a method for understanding a complex instance through description and contextual analysis. The result is both descriptive and theoretical in the sense that questions are raised about why the instance occurred as it did, and with regards to what may be important to explore in similar situations.

The case study design also allows for the attainment of knowledge about a research participant's experience of a traumatic event and current experiences of posttraumatic stress symptoms, while allowing the researcher to compare the symptoms of different individuals (Whitley, 2002).

The case studies in this research focused on individuals who have been the victim of a specific violent crime, namely motor vehicle hijacking, armed robbery or assault, more than a year ago. These individuals experience posttraumatic symptoms that do not meet the criteria for a diagnosis of PTSD. A total number of three case studies were included in this study. The data gathered was sufficient and allowed for the in-depth study and analysis without encountering continuous repetition of data, which would not contribute to the effectiveness of the research. The data collected in these studies was analysed and comparisons were scrutinised.

## 5.7 Data collection process

The data collection process includes participant sampling as well as methods of data collecting. This includes responses on the posttraumatic stress disorder checklist (PCL-S), the impact of event scale (IES) as well as interview responses. Each of these topics will be discussed briefly.

### 5.7.1 Participant sampling

Potter (1996, p.104) is of the opinion that, in qualitative research, sampling is concerned with "gaining access to relevant evidence about the phenomenon". This research obtained research participants through convenience or purposive sampling. Potter (1996) describes this as the attainment of information that is easily accessible to the researcher. The researcher attained participants by approaching her acquaintances and explaining what her research entails as well as the motivations for and importance of this research project. If they wished to do so, these acquaintances then approached individuals who have experienced trauma due to crime. These individuals were requested to contact the researcher if they wished to participate in the study. As is clear from this procedure, the researcher did not directly approach any individuals who wanted to participate in the study. Appointments were then set up during which the researcher met the prospective research participants.

Upon meeting the potential research participants, the researcher explained the motivation and aim of the research project as well as the procedures that were to be followed. If the individual was, after the introduction, still willing to participate they were invited to sign a consent form (Appendix A) as well as an audio tape consent form (Appendix B). Only individuals over the age of eighteen (18) were included in the target population of this study. This was not a hindrance as the researcher was only approach by individuals older than eighteen (18) years of age.

Five individuals were approached through convenience or purposive sampling. In order to ensure that they did not have enough symptoms to validate a diagnosis of PTSD, the Posttraumatic Stress Checklist- Specific traumatic event (PCL-S) was administer scored and interpreted. Following this procedure two participants were excluded from the study as they met the criteria for a diagnosis of PTSD. These individuals were informed of the results of the PCL-S when the researcher noted that they still seemed to be struggling with the traumatic events. They were also informed that participation in the study may evoke some of their previous experiences and it is recommended that they do not participate in the study. These individuals were also provided with a list of organisations that would assist them with trauma counselling at

no charge to them. One of the individual's declined this offer, but the second individual stated that she was currently in therapy and would rather follow this up with her psychologist rather than seeing someone unknown to her.

Following this procedure, three research participants were selected to participate in this study. They were asked to complete an IES and then participated in semi-structured interviews. Following their interviews these participants were also asked if they needed therapeutic intervention. One of the individuals asked for assistance and the researcher organised trauma counselling at the facility closest to the participant.

The researcher feels it important to note that this entire procedure for participant sampling was cleared by the ethics committee of the University of Pretoria.

### 5.7.2 Method of data collecting

In case studies, data collection is seen as a topic that is related to the design of the study. Data collection is also seen as playing a vital role in the internal validity and construct validity of research (Yin in Tellis, 1997). Due to the specific nature of the research question, this study warrants that certain procedures be in place that will ensure that only individuals with residual, subclinical symptoms of PTSD be interviewed. These procedures included the following:

The data collection process is threefold. Firstly, all participants were asked to complete a Posttraumatic Stress Disorder Checklist. The PCL-S is a self-report assessment, which can be used in diagnosing those who meet the criteria for posttraumatic stress disorder. Secondly, all participants were asked to complete an Impact of Event Scale which helps in identifying symptoms that are present. Lastly, all participants were interviewed in order to gain more information about the symptoms, identified through the Impact of Event Scale, the violent crime they have experienced as well as how their lives have been affected.

#### 5.7.2.1 Posttraumatic stress disorder Checklist (PCL)

To prevent the inclusion of individuals who suffer from PTSD in this study all research participants initially completed the PCL. The PCL consists of seventeen (17) items and is a self-report tool that assesses for symptoms associated with posttraumatic stress disorder (PTSD). Keen, Kutter, Niles, and Krinsley (2008) explained that individuals describe the degree to which they have experienced the various symptoms associated with PTSD during the past month. The assessment tool utilises a five point Likert scales that has anchors varying from "Not at all" to "Extremely." They stated that three versions of the PCL are currently in use. The first is a military version (PCL-M) which only applies to military-related traumatic incidents. It, therefore, looks at re-experiencing and avoidance symptoms as experienced by military personnel. The second is a civilian version (PCL-C) which considers re-experiencing and avoidant symptoms which applies to any stressful experience. The third is a study-specific version, in which re-experiencing and symptoms of avoidance pertain to a specific stressful event that has been specified by the researcher. The third version, the PCL-S, was utilised for the purpose of this study, as this study focused on a specific event of violent crime as experienced by the individual.

Keen et al. (2008) believed that the PCL is a useful checklist that can be used for assessing and identifying individuals that require a more comprehensive evaluation. This statement was supported by Blanchard, Jones-Alexander, Buckley, and Forneris (1996) who were of the opinion that the PCL had value as a brief screening tool for posttraumatic stress disorder.

The PCL can be scored by two different procedures that may either provide information on the symptom severity of posttraumatic stress disorder or provide information with regards to a diagnosis. Keen et al. (2008) illustrated that the scoring of the PCL consists of either an overall score with a cut-off score of thirty (30) or a scoring approach that focuses on symptom clusters associated with PTSD. The latter method correlates with the diagnostic criteria for PTSD as set out by the APA (2000) in the DSM-IV-TR. This criteria requires a score of 3 ("Moderately") or greater on

one cluster B symptom (re-experiencing), three cluster C symptoms avoidance/numbing), and two cluster D symptoms (hyperarousal). This study made use of an overall cut-off score, where a total score of 30 or above indicates that an individual experiences PTSD. Individuals who did not test positive for PTSD were invited to participate in the rest of the study.

#### 5.7.2.2 Impact of Event Scale (IES)

To illustrate the specific experiences of individuals all research participants completed the Impact of Event Scale or IES. This scale was developed by Horowitz, Milner, and Alvarez (1979, p.211) and consists of 15 questions that an individual grades on four levels, starting from "Not at all" to "Often". This self-report instrument measures intrusive recollection phenomena related to the traumatic event and consequent avoidance behaviour.

The IES was developed and published by Horowitz just prior to the release of the third edition of the Diagnostic and Statistical Manual of Mental Disorders and is grounded in Horowitz's model of emotional processing following a trauma. According to her model, until a traumatic experience is psychologically assimilated, the individual will alternate between experiences of intrusive thoughts and feelings in one moment and avoidance strategies in the next. As a result of this model, the IES was developed with two subscales. The first focusing on intrusions, for example, repeated thoughts about the traumatic experience. The second focusing on avoidance, for example, effortful avoidance of situations that serves as reminders of the trauma (Beck et al., 2008).

Wohlfarth, Van den Brink, Winkel, and Ter Smitten (2003, p.101) believed that this measure is a suitable screener for PTSD. However, this statement was disputed by Joseph (2000) who stated that the IES should not be used as a diagnostic measure. This statement is supported by the researcher for a number of reasons. Firstly, Beck et al. (2008) noted that the IES focused on intrusion-based symptoms and avoidance symptoms, but neglects the presence of physiological hyperarousal, which has been integrated in the diagnosis of posttraumatic stress disorder since the publication of the DSM-III. Eid et al. (2009) elaborated that hyperarousal symptoms include irritability,

an exaggerated startle response as well as experiencing concentration difficulties. Joseph (in Beck et al., 2008) subsequently believes that the IES falls short as a measure of PTSD as defined within the DSM. Secondly, as stated by Larson (in Beck et al., 2008) the IES may assess general negative affectivity rather than any trauma-specific phenomena.

The IES does have relevance for this research despite its shortcomings. Horowitz, Wilner, and Alvarez (1979, p.209) originally constructed the IES to measure "the current degree of subjective impact experienced as a result of a specific event". The IES is therefore useful to measure the specific symptoms individuals are left with following their traumatic experience of a violent crime. These subjective experiences are then further explored by means of a semi-structured interview.

#### 5.7.2.3 Semi-structured interviews

One-on-one, semi-structured interviews were conducted with research participants. This allowed for the interview to be "organised around ideas of particular interest, while still allowing considerable flexibility in scope and depth" (as stated by May in De Vos, Strydom, Fouché, and Delport, 2002, p. 298). By using semi-structured interviews the researcher is able to gain a detailed picture of the participant's perceptions of a particular topic, while focusing on issues important to the research study.

Prior to the interview the researcher defined the information that needed to be collected for the study to ensure that the data collected from the interview relates to the specific research questions. Information defined included, but was not limited to, among others, the date on which the traumatic event occurred; the type of traumatic event; the duration of the event; the emotional effects following the event; changes people have made to their lives following the event and reasons therefore; and emotional experiences that they still attribute to the event. The semi-structured interview schedule was added as Appendix C.

## 5.8 Data analysis

Thematic analysis was used in analysing the data collected. Boyatzis (in Fereday & Muir-Cochrane, 2006, p.4) defined a theme as "a pattern in the information that at minimum describes and organises the possible observations and at maximum interprets aspects of the phenomenon". Hayes (2000) distinguishes between two types of thematic analysis. The first adopts an inductive approach to research in which theoretical insights emerge from the data. The second type of thematic analysis is theory-driven. Hayes (2000, p.177) states that "the purpose of the qualitative analysis in this type of research is to provide information which will allow the researcher to come to a conclusion about whether the hypotheses seem to have been supported or not." According to Hayes (2000) the process of conducting a theory-led thematic analysis begins differently than a conventional thematic analysis. Only the theory-driven thematic analysis was implemented in this research.

The analysis was started by exploring existing theory and predicting the possible themes that the data is likely to contain. These predictions formed the basis of the themes of the analysis. Once the themes were analysed the preparation of the data started. The semi-structured interviews were transcribed in accordance with the requirements. This allowed repeated scrutiny of the data. Once this had been done, the data analysis took place. Each theme was explored individually allowing for the identification of all information related to that theme. After exploring all the themes each theme was analysed and specific attention was given to the meanings and effects as recorded by participants with regard to that particular theme. This stage allowed the researcher to establish whether or not the research outcomes support or challenge the predictions.

## 5.9 Reliability and validity

Reliability and validity are critical factors in any scientific research. LeCompte and Goetz (in Bryman, 2007, p.3) claimed that the "value of scientific research is partially dependent on the ability of the individual researcher to demonstrate the credibility of their findings." This is especially important in qualitative research as it has been

criticised and said that qualitative research fails to adhere to principles of reliability and validity (Magoon, Reichardt, & Cook in Bryman, 2007).

### 5.9.1 Reliability

The following was taken into consideration with the objective of ensuring that this study meets with the criteria of reliability.

LeCompte and Goetz (in Bryman, 2007, p.7) defined reliability as "the extent to which studies can be replicated". LeCompte and Goetz (in Bryman, 2007, p.7) explain that delineating the theoretical premise and defining constructs that inform and shape the research facilitates such replication, and thereby increases the reliability of a study.

Reliability consists of internal and external reliability. External reliability addresses the question of an autonomous researcher discovering identical phenomena and making similar conclusions when faced with similar circumstances. Internal reliability addresses the extent to which different researchers would match the findings of the researcher if they were given the same data to analyse (LeCompte and Goetz in Bryman, 2007, p.4). Hollway and Jefferson (in Willig & Stainton-Rogers, 2008, p.115) are of the opinion that the reliability of qualitative research can be checked, but never guaranteed, when the researcher's interpretations and analyses are studied by others and the results are found to be similar to that of the original researcher.

Reliability of the findings of this study is supported by the setting of specific parameters for the target group, namely: One, that they should not meet the diagnosis of PTSD. This is tested through the use of the PTSD Checklist. Two, the criteria that the traumatic event must have taken place at least twelve months prior to partaking in this study. Three, all participants must be eighteen years or older. Four, the formulation and conducting of semi-structured interviews. Five, information gathered from the interviews was recorded verbatim and transcribed. Six, three participants were interviewed. This allowed for more accuracy and reliability. Seven, during the thematic analysis the data was analysed repeatedly, for each case study, each theme

and when allocating meanings and effects ascribed to the traumatic event. This facilitated the process to establish whether or not the data confirms the problem statement.

### 5.9.2 Validity

According to LeCompte and Goetz (in Bryman, 2007, p.17) validity "necessitates demonstration that the propositions generated, refined, or tested match the causal conditions which obtain in human life". Internal validity refers to the extent to which systematic observations and measurements are genuine reflections of a specified reality whereas external validity addresses the extent to which such reflections may be measure against various groups (LeCompte & Goetz in Bryman, 2007, p.4). There are two important issues that need to be taken into consideration when evaluating the validity of qualitative research, as defined by LeCompte and Goetz (in Bryman, 2007, p.17). Firstly, do the researchers observe or measure what they intended to and, secondly, to what extent are the constructs researched applicable across groups.

The validity of this study is strengthened by the fact that the problem statement is informed by current research. Adequate literature review, including foreign and local information, was conducted in support of defining the problem statement. Data collected was obtained from research participants through an in-depth semi-structured interview, allowing for focused questions that are based on the information obtained in the literature review. The data analysis process provided for multiple transcription and analysis of the data. This ensured the quality of the information derived from the data.

## 5.10 Ethical considerations

To ensure the ethical compliance of this qualitative study the following were set as criteria for compliance: procedural ethics, ethics in practice, ethical problem solving as required by the code of conduct and professional support to participants if and when required.

Renzetti and Raymond (1993, p.14) define ethics as "to do with application of a system of moral principles to prevent harming or wrongdoing (onto) others, to promote the good, to be respectful and to be fair". Guillemin and Gillam (in Bryman, 2007) suggested that there are at least two major dimensions of ethics in qualitative research. These are (a) procedural ethics, which involves seeking approval from a relevant ethics committee to undertake research involving people; and (b) ethics in practice or the common ethical issues that arise during the research. A third dimension was defined by Guillemin and Gillam (in Bryman, 2007, p.170) as "research ethics as articulated in professional codes of ethics or conduct". How these dimensions apply to this research project will be discussed briefly.

"Ethics in practice" include topics of confidentiality (Guillemin and Gillam in Bryman, 2007), trust (Ryan in Seale, Gobo, Gubrium & Silverman, 2004) and interacting in an empathically, non-exploitative way towards the research participants (Guillemin and Gillam in Bryman, 2007). In this study research participants were constantly and consistently treated in a respectful manner. The attainment of informed consent is vital for this research as "research subjects have the right to know that they are being researched, the right to be informed about the nature of the research and the right to withdraw at any time" (Ryan in Seale et al., 2004). In this study the research participants signed forms of informed consent which clearly stated the topic researched the procedures to be followed and addressed concerns of confidentiality and anonymity. Following the collection of data, the data is stored in a secured container and not shared with anyone other than the parties relevant to this research. In accordance with research requirements, the data has to be stored at the University of Pretoria's Humanities Department for a minimum of 15 years subsequent to the completion of the research project. In publishing the research, no research participant's name may be mentioned and participants have to be given code names which are untraceable.

Renzetti and Raymond (1993) believe that a prerequisite of ethical problem solving is an accurate assessment of the potential for risks and sensitivities. This entails recognising how issues may arise in all phases of the research process from theory to application, recognising the vulnerability of each of the persons or institutions that

may be affected by the research, and understanding the kinds of ethical issues that may arise. In this research, the researcher is fully aware that discussing previously experienced traumatic events with research participants may lead to the re-experiencing of the event and that therapeutic intervention may be needed following the interviews. All participants were informed that therapeutic intervention sessions would be made available if required. These interventions were not to be performed by the researcher, but participants were referred to relevant institutions at no cost to the research participant. It is also important to mention that the researcher has previously completed a year's internship for clinical psychology and is equipped to deal with difficult situations if and when they manifested during the interviews.

Due care was taken to focus on the accuracy of the data and the interpretation thereof. This was achieved by ensuring that there were no omissions in either the collection or analysis of the data throughout the research process.

## 5.11 Conclusion

This section focused on this research project's problem statement, namely the exploration of residual, subclinical symptoms following a single traumatic event of violent crime, specifically motor vehicle hijackings, assaults and armed robbery. These symptoms should persist after a year from the date of the incident and should not be significant enough to meet the criteria for posttraumatic stress disorder, but must be momentous enough to influence the research participant's life on a daily basis. This was examined through a qualitative research method, specifically the case study method.

Research participants were selected through convenience or purposive sampling. Research participants were to complete a PTSD Checklist (PCL-S) in order to establish if they may partake in this study by not meeting the criteria for a diagnosis of PTSD. If this criterion was met the research participants were asked to complete and Impact of Event Scale and were then subjected to a semi-structured interview before the thematic content analysis began. During this entire process ethical

considerations were the foundation of this research and steps were taken to ensure that criteria were adhered to and that conclusions were reliable and valid.

# CHAPTER 6:

# Exploring the results of the research

## 6.1 Introduction

This chapter outlines the criteria for the selection of the research participants and a short description of the traumatic event that each participant experienced. Research themes that were revealed in the initial data analysis are identified and the findings of the analysed interviews are discussed briefly in order to assess if they substantiate the initial themes.

## 6.2 Criteria for the selection of research participants

Clear guidelines for participant selection had been set out, namely:

- The participant should have experienced the specific violent crimes of a motor vehicle hijacking, an armed robbery or an assault.
- This encounter should be the individual's first and only experience of a violent crime.
- The violent crime should have taken place more than one year ago.
- The participant should not meet the criteria for PTSD, which was assessed with the PCL-S.

In obtaining research participants it became clear that restricting exposure to only one event of violent crime was limiting and resulted in a lack of research participants that met the criteria to participate in this study. The difficulty in finding research participants, the subsequent broadening of the restrictions and a summary of the selected research participants will be discussed briefly.

### 6.2.1 Difficulty in finding research participants

During the process of obtaining research participants two complications arose. Firstly, individuals were not willing to discuss their traumatic experiences and did not want to partake in the study.

Secondly, two individuals who were willing to participate in the research still met the criteria for PTSD. This was both surprising and informative, as the incidents took place between four and seven years prior to this study, indicating that the PTSD symptoms had persisted over long periods of time. Neither of these individuals had received any type of therapeutic intervention following their exposure to violent crime, although one individual was placed on medication for anxiety and depression.

It is noteworthy to add that an additional two individuals who volunteered to participate in the study experienced a "less severe" crime of smash-and-grab. These individuals were excluded due to the fact that they had not experienced any of the three violent crimes that were the focus of this study. An additional two individuals who volunteered had experienced more than one violent crime, namely two armed robberies and an armed robbery and an aggravated robbery, independently. A further two individuals who had volunteered to participate had experienced violent crime less than one year previous to this study and one of these individuals had experienced a total amount of three armed robberies.

Due to these complications, the parameters of the study were broadened to include individuals who have been the victims of more than one violent crime, while still focusing on the crimes of armed robbery, motor vehicle hijacking and assault with a deadly weapon. While broadening these parameters the researcher kept in mind that experiencing more than one violent crime may either have a cumulative effect, resulting in an inability to distinguish between the separate crimes, or it may lead to desensitisation. All of these possibilities were kept in mind during the interview and the effect they had on the specific individual will be explored.

### 6.2.2 Participants who were selected

The researcher chose three individuals based on their experience of a traumatic event of a violent crime, specifically motor vehicle hijacking, armed robbery and assault with a deadly weapon. All three participants were over the age of 18, and were twenty-nine (29), thirty (30) and thirty-one (31) years old, respectively. Two of the participants experienced an armed robbery, which were, independently, followed by non-violent crime of housebreaking and theft of a cell phone. A third participant experienced an armed robbery during her early childhood, and an additional crime of aggravated robbery in adulthood. The most recent, and for two participants their only, experiences of violent crimes had taken place between one year eleven months and six years ago respectively.

The research participants did not meet the criteria for a diagnosis of posttraumatic stress disorder. This was ensured through the administration of the Posttraumatic Stress Checklist- Specific traumatic event (PCL-S) prior to undertaking the interviews. The cut-off score for the PCL-S was 30. This was strictly adhered to and individuals who scored 29 or less were able to partake in a semi-structured interview.

The Impact of Events Scale was also used as a means to evaluate which posttraumatic symptoms participants were experiencing. As individuals frequently thought about their experiences of violent crime in preparation for this study, it is important to note that this may have influenced their scores on this scale. It is therefore important to evaluate these scores cautiously and to take it into consideration with the findings of the PCL-S as well as additional information gathered through the interview.

None of the participants knew the individual who perpetrated the crime. This excluded variables such as intimate partner violence, family violence and long-term victimisation.

The crimes researched were two of the participants' first and only experience of a violent crime. The third participant had experienced two separate incidents of violent crime. This introduced the variables of repeat exposure to violent crime and the effect

thereof into the study. These variables were explored in the interview in order to assess their effect on the individual's experiences.

All of the participants' traumatic experiences occurred more than a year ago from the date of the interview. This enabled the researcher to focus on long term, residual effects of the violent crimes.

None of the participants have received therapy following their traumatic experience. The reasons for this varied between individuals not feeling that they needed therapy following the event or not being aware of the benefits that therapy may have.

## 6.3 Participants interviewed

Three participants were interviewed. This section will give a short description of the crimes that they have experienced, their scores and the findings of the PCL-S and IES, as well as information gathered through semi-structured interviews.

### 6.3.1 Respondent no.1

Respondent no.1 is a 31-year-old male. He was a victim of an armed robbery at his residence in Pinetown in 2007. The armed robbery took place at approximately 7pm in the evening and lasted about three to four minutes. Respondent no.1 was not alone at the time of the incident as his girlfriend was with him when the armed robbery occurred. He completed the PCL-S with a score of 27, which qualified him to partake in the study.

Respondent no.1 described his incident as follows: he was at home with his girlfriend, when she heard the sound of someone jumping over their wall in their backyard. There were complaints of delinquent youths in the area, so Respondent no.1 went outside, ready to confront them, but did not see anything and he went back into their house. About a minute later he heard shouting from the neighbour's house instructing someone to get out and go away. Respondent no.1 then heard someone at his front

door and shouted for them to go away. Still under the impression that it was the delinquent youths, he went outside and grabbed a garden fork on his patio in order to confront them. As he grabbed the garden fork, a man holding a firearm appeared around the corner and directed Respondent no.1 to put the garden fork down. He enquired whether he was alone where after the respondent replied that there was someone else in the house. When he was instructed to hand over his cell phone and wallet Respondent no.1 reluctantly complied. He was then ordered to wait outside, while the three armed robbers went inside the residence. Respondent no.1 was concerned that they might hurt his girlfriend and went over to the neighbours asking if they had a weapon. They stated that they did not have one. After a while it became silent and Respondent no.1 crept back to his house, trying to see and hear if they were still inside. When it was quiet he went into his house and discovered that his girlfriend was unharmed but that jewellery and various items of value were taken.

Directly following the incident Respondent no.1 experienced a difficulty in falling and staying asleep, anxiety, anger and hyperarousal. He was also constantly thinking about the incident, experienced flashbacks and nightmares. He avoided places that made him feel vulnerable and could lead to a second victimisation. Respondent no.1 was constantly anxious about whether they may return and subsequently made plans on how he could fortify his house. Shortly following this incident Respondent no.1 started looking for employment in Gauteng. When he found other employment, four months later, he left his employment in Pinetown and moved to Centurion. Two to three months after the armed robbery Respondent no.1 was informed that men were arrested for possession of stolen property that had included some of his possessions, which made him feel safer and instilled a sense of satisfaction. Respondent no.1 never attended any type of therapeutic intervention as he was unaware of this option or of the benefits it could have.

Respondent no.1 currently still experiences anger, anxiety and symptoms of hyperarousal. He has become more aggressive and irritable towards individuals in the same demographic group as the armed robbers. He also feels more unsafe and is more wary in general and is constantly on the lookout for anything suspicious. This behaviour is not limited to his home atmosphere, but is extended to all areas of his life. Respondent no.1's scores on the Impact of Events Scale indicate a total of 33,

which puts him in the "moderate" range of PTSD symptom experience. On the intrusion scale he scored 16 and on the avoidance scale he scored 17. This, together with the information gathered through the interview, indicate that both intrusion and avoidance symptoms still persist.

### 6.3.2 Respondent no.2

Respondent no.2 is a 29-year-old female who was a victim of an aggravated robbery in November of 2011. The robbery took place at Blood Street in Pretoria CBD, just before 12 o'clock in the afternoon and lasted for approximately 5 minutes. She was alone in her car at the time of the incident and was employed as an area sales representative. Respondent no.2 completed the PCL-S with a score of 29, which qualified her to partake in the study.

Respondent no.2 describes her experience as follows: she was on her way to see a client when she stopped at a red light at the robot in Blood Street. While waiting for the light to turn green she saw a man running around the car to the driver's side window, which was slightly open. The man put his hand into the window and began pulling at the necklace on Respondent no.2's neck. When the necklace would not break she hit the man's arm in an attempt to free herself. The man reacted by choking her with his one hand, reaching into the window and opening the door with the other. When the car door was open, Respondent no.2 continued hitting the man where after he hit her with his one hand, while continuing to try and break the chain with the other. In this process Respondent no.2's neck acquired cuts and she had bruises on her face and shoulders. When the chain broke the man ran away and Respondent no.2 climbed back in her car and drove home.

Directly following this incident Respondent no.2 was angry and irritable. Due to her verbal expression of her felt aggression, she experienced difficulties with her interpersonal relationships. In addition to this, she blamed her employment for sending her to unsafe locations and resigned about a month following this incident, after she had gained new employment.

Respondent no.2 still experiences anger following the loss of her necklace as it was a gift from her, now deceased, father. Following this incident she has a racist attitude towards individuals in the same demographic group as the assailant. Respondent no.2 is now hypervigilant and takes extra precautionary measures when she drives, for example, locking her doors, driving with closed windows and parking in different locations. Respondent no.2 blames the stress that she experienced during this incident for her hyperthyroidism that developed subsequent to this incident. At times when she is reminded of the experience she still experiences the physiological symptoms of a faster heartbeat, indicating symptoms of arousal, which dissipates shortly following their presentation.

Respondent no.2's scores on the Impact of Events Scale indicate a total of 22, which puts her in the "moderate" range of PTSD symptom experience. On the intrusion scale she scored 12 and on the avoidance scale she scored 10. This, together with the information gathered through the interview, indicates that both moderate intrusion and moderate avoidance symptoms still persist.

Respondent no. 2 has had a prior experience with a violent crime. She and her mother were the victims of an armed robbery when she was the age of seven. In this incident five armed men gained access to their property, took Respondent no.2 and, at various times, held a knife against her throat and put a gun in her mouth in order to force her mother to give them valuable items and money within the home. Respondent no.2 also watched as her mother was badly assaulted by the perpetrators. This incident lasted for five hours, before the men fled. Respondent no.2 did not undergo any therapeutic interventions for either of these incidents.

Respondent no.2 developed a fear of the dark following this incident, which was resolved when she went to university at the age of 19. She still experiences dreams about this incident and is nervous when she is home alone.

Due to the traumatising experience of the armed robbery she had experienced as a child, Respondent no.2 believes that, in comparison, the recent robbery was resolved more swiftly. This was due to the fact that it was experienced as a less severe event.

### 6.3.3 Respondent no.3

Respondent no.3 is a 30-year-old female who was a victim of an armed robbery in 2008. The armed robbery took place at the home that she shared with her boyfriend in Benoni. The incident occurred at approximately 7:30pm and lasted for approximately 45 minutes. Respondent no.3 was with her boyfriend at the time of the incident. Respondent no.3 completed the PCL-S with a score of 29, which qualified her to partake in the study.

Respondent no.3 describes her experience as follows: she and her boyfriend had come home from grocery shopping. While entering the gate leading to their garage, she noticed that the chain on the gate was without its lock. Without giving it much thought, she informed her boyfriend where after they parked the car and entered the house. Respondent no.3 went to switch the TV on while her boyfriend was unpacking the groceries. The door flew open and four armed men entered the house. The two victims were ordered to lie on the floor and they were tied up using the TV cable. Their jewellery was taken and, after learning that there was no safe, the men took all the valuables they could find and packed it in Respondent no.3's car. The men enquired about a Tracker system on the car, but after she was slapped Respondent no.3 refused to answer their questions. The two victims were instructed to remain on the floor as they were informed that the perpetrators would return. They heard a smashing sound, later discovering that the assailants had driven the car into a concrete block before driving away. Respondent no.3 and her boyfriend climbed out of the bedroom window and ran to the main house on the property in order to inform the owners of what had just taken place. Thereafter they also phoned the police and informed Respondent no.3's employer that the company car had been stolen.

Directly following the incident Respondent no.3 experienced heart palpitations, she was shaking and struggled to speak, indicating symptoms of arousal. She also experienced anger, which was exacerbated by the police accusing her friends of committing the crime. She experienced the whole incident as surreal and expressed feeling violated which led to feelings of anger. She experienced difficulty in falling and staying asleep at night and, consequently, was more irritable following the armed robbery. Respondent no.3 also experienced difficulties in concentration shortly

following the incident and commented on feelings of relief and gratefulness that they were not physically harmed.

Following the armed robbery, Respondent no.3 left the house and refused to live there. She returned the following day to collect her remaining belongings and moved into their current house.

The night of the armed robbery Respondent no.3 and her boyfriend briefly saw a trauma counsellor. She has not attended therapy following this as she did not feel that it was essential.

Respondent no.3 stated that she does not think about the event at all, but later noted that she does tell her story if she hears that someone had experienced a similar crime. She also described feeling numb towards the whole situation and having placed it in the back of her mind. Following the armed robbery Respondent no.3 has become more cautious and hypervigilant. She also scares more easily following the incident. She feels unsafe and does not go out late at night anymore and dreads coming home alone. Respondent no.3 still displays signs of anxiety as she would drive around the block instead of pulling her car into her garage when she feels unsafe. Following the armed robbery she gets physically ill more regularly and frequently complains about headaches or gets influenza. She installed an alarm system into their house even though it causes financial strain.

Respondent no.3's scores on the Impact of Events Scale indicate a total of 27, which puts her in the "moderate" range of PTSD symptom experience. On the intrusion scale she scored 1 and on the avoidance scale she scored 26. This, together with the information gathered through the interview, indicates that elevated avoidance symptoms still persist.

## 6.4 Interpreting the data

When interpreting the data the researcher was aware of the importance of objectivity and focused on the actual descriptions of experiences as provided by the respondents.

The analysis was done over a period of time as this allowed the researcher to develop an awareness of the phenomena as described by the research participants. The researcher kept in mind that individuals depict their experiences differently and express their emotions in their own way and therefore focused on subtle insinuations made by the research participants.

## 6.5 Analysis procedure

Greenhalgh and Taylor (1997, p.742) believe that "Having amassed a thick pile of completed interview transcripts or field notes, the genuine qualitative researcher has hardly begun." They believe that it is not adequate to look through transcriptions and search for quotes that confirm a specific theory. Instead, the researcher should uncover a methodical way of examining her data and she must look for instances of cases that seems to disprove or test the theories described. This can be achieved through content analysis. This type of analysis consists of compiling lists of coded categories and placing each section of the transcribed data into the selected categories. This allowed the researcher to compare the declarations made by each of the participants on a specific topic.

This research followed the six phases of data analysis for thematic analysis as set out by Braun and Clarke (2006). Firstly, the researcher familiarised herself with the data. This was done through actively reading through the three transcriptions repeatedly, searching for meaning and patterns while making notes or marking ideas for coding that enabled the researcher to go back to in subsequent phases.

The second phase involved generating initial codes. While reading the data the researcher produced a preliminary list of ideas about what the information contained and what is fascinating about the content. Consequently, the data was broken up into its most basic element that could be assessed in a meaningful way. Systematically working through the entire data set and giving full and equal attention to each data item formed the basis of the repeated patterns or themes that are present across the data set. In this phase it was important to code for as many potential themes as possible; to code extracts of data inclusively, i.e. keeping a little of the surrounding

data if relevant; and by coding individual extracts of the data in as many themes as they fit into.

The third phase involved searching for themes. According to Boyatzis (in Braun & Clarke, 2006) this is where the interpretive analysis of the data occurs. The researcher analysed the codes and considered how the codes may combine to form an overarching theme. This is also where the researcher analysed the connection between codes, between various themes and between various levels of themes. This phase ended with a collection of candidate themes and sub-themes and all of the extracts of data that have been coded in relation to them.

Phase four involved refinement of the candidate themes that were identified in phase three. Here it was important to note that data within themselves should come together meaningfully, while there should be apparent and particular distinctions between themes. This was achieved by reviewing and refining themes on two levels. Level one involved checking at the level of the coded information extracts and consisted of reading all the extracts for each theme and considering whether they formed a coherent pattern. If candidate themes did appear to form a coherent pattern the researcher repeated this procedure, but in the entire data set. The researcher measured the validity of each individual theme relative to the data set and whether the candidate thematic map accurately reflected the meaning evident within the data set as a whole. This phase allowed the researcher to code additional data that has been absent in previous coding phases.

Phase five involved defining and naming the themes presented in the analysis. Here it was important to identify the essence of each theme and determining what aspects of the data each theme captures. A detailed analysis was written for each individual theme. It was important to consider each theme separately as well as in relation to other themes and how these fit into the broader story the researcher is telling in relation to the research questions. In this phase sub-themes were helpful for providing structure to a great and intricate theme and for signifying the hierarchy of significance within the data. Braun and Clarke (2006) believe that an individual tests whether a theme is clearly defined by trying to describe the scope and content of each theme in a

couple of sentences. Names of the themes should be concise and immediately give the reader a sense of what the theme is about.

The sixth, and final, phase involved the ultimate analysis and write-up of the findings. This provided the researcher the opportunity to tell the complex story of the data in a way which convinces the reader of the value and validity of the analysis. The review must provide sufficient evidence or data extracts of the themes within the data to demonstrate the prevalence of the theme. Lastly, extracts needed to be embedded within an analytic narrative that illustrates the story that is being told about the data. The researcher's analysis, therefore, needs to go beyond description of the data and make an argument in relation to the stated research question.

## 6.6 Themes identified within the data analysis

There were four separate themes identified within the analysis of the data gathered from the three respondents, namely: Changes in cognitive schemas; Lasting posttraumatic symptoms that persist without meeting the criteria for PTSD; the effect of more than one crime; as well as Additional effects of violent crime not classified as posttraumatic symptoms according to the APA (2000). Each of these themes has various subthemes. The overall themes and accompanying subthemes will be discussed and extracts from the data will be added as confirmation of these findings. This chapter's focus is on the identification and verification of the various themes. The themes in relation to relevant research will be discussed in the next chapter.

### 6.6.1 Theme 1: Changes in cognitive schemas

Sternberg (2009, p.317) defines a schema as "… a mental framework for organising knowledge." Price (2007, p.345) noted that "Core schemas are those schemas which develop during childhood from our interactions with significant others." Beck (in Price, 2007) believed that core schemas are global patterns of beliefs about ourselves, others and our environments that are generally sub-conscious. These core schemas operate at the most fundamental level of an individual's belief systems and give rise to their immediate beliefs such as rules, attitudes, underlying assumptions and

conditional beliefs. The core schemas also influence an individual's perceptions of events.

Price (2007) is of the opinion that most individuals develop relatively positive and flexible core schemas which allow assimilation of perceived material into pre-existing schema structures and facilitate adaptation to new experiences. However, extreme and rigid core schemas may develop in childhood in response to parenting styles which neglect to provide the child with adequate safe, stable, nurturing or empathetic environment. These early maladaptive schemas may predispose some individuals to developing PTSD symptomology when they are confronted with traumatic stimuli.

The research participants' cognitive schemas and how they were affected by the violent crimes will be explored as Theme 1. This theme will also include the effect that these affected schemas have on social relationships and the solidity of communities.

#### 6.6.1.1 Changes in cognitive schemas in relation to the world

The respondent's cognitive schemas about the world that they live in were affected differently. Two of the respondents adjusted their schema in order to assimilate the new experience of violent crime, which negatively affected the way in which they viewed the world. The third respondent's negative view of the world was confirmed following her traumatic experience. The following extracts from interviews affirm this finding:

**Respondent no.1**

(I= Interviewer, R= Respondent)

I: Dink jy dat die insident jou meer onveilig in die algemeen laat voel het?

R: Ja, ek dink dit het my illusie dat die wêreld grootendeels goed is mooi ge-shatter. En ek's nou baie meer bewus dat daar allerhande booshede in allerhande vorme en in allerhande plekke is wat mens nie sou verwag nie. Die hele insident het by my huis gebeur, jy voel tog veilig by die huis en van toe af is my huis nie meer veilig nie. En

so toe dink ek, as my huis nie meer veilig is nie, wat is nog nie veilig nie?

I: So dit het jou alles laat bevraagteken?

R: Ja. Pretty much.

Translation

I: Do you think that the incident made you feel more unsafe in general?

R: Yes, I think that it shattered my illusion that the world is mostly good. And now I am more aware that there are all kinds of evil in different forms and different places, where people do not expect it. The whole incident happened at my home, you feel safe at your home, and since then my house was not safe anymore. And so I thought, if my house is not safe anymore, what else is not safe?

I: So it made you question everything?

R: Yes, pretty much.

From this extract it is evident that this respondent's view of the world was negatively affected as the world is now seen as being bad, containing "evil in different forms and places". The world has therefore become a scary, unpredictable place where you are unsafe and vulnerable.

**Respondent no.2**

I: Het die, het die robbery die manier waarop jy na die wêreld kyk verander?

R: Ja, ek sal so sê.

I: Oukei, so hoe was dit voorheen gewees?

R: Uhm, ek sal sê ek was voorheen naïef. Ek was, ek het geen probleem met mense gehad nie en almal is my vriend en ek is happy-go-lucky. Ek is nogsteeds so, maar nou is ek meer geïrriteerd … met dom …

I: En bietjie meer cautious?

R: Ja, ag maar, ek sal, wil nie lelik klink nie, maar ek is van die oog af dadelik dink ek 'n swarte is 'n swarte, maar dit is nie, ek weet ek het 'n baie groot rassis geword en ek dink nie dit gaan verander nie. Ek dink daar is baie swartmense wat ek respekteer, wat ek mee werk, nou, wat ek ontmoet het na die ongeluk, wat ek besef, nee, hierdie mens weet waarvan hulle praat, maar meederheid irriteer my, waar voorheen het ek nogals, was ek, het ek 'n verstandhouding gehad en ek was geduldig. Waar nou, die oomblik

wat ek agterkom ‘n swartmens is bietjie dom of hy praat nie, artikuleer nie reg nie of ek kan nie met hom kommunikeer nie omdat hy nie lekker kan praat nie, dan, uhm, het ek nie geduld nie. Waar voorheen sou ek geduld gehad het. So ek sal nie sê ek, almal is sleg nie. Ek sê net, dit is, as iemand vir vyf minute met my praat en hy irriteer my dan raak ek vinnig geïrriteerd. Maar ek, daar is swartmense wat ek mee praat en respekteer omdat ek weet as ek met hulle praat is, kan ek, is hulle op my level.

Translation

I: Did the robbery change the way that you view the world?

R: Yes, I will say so.

I: Okay, so what was it previously?

R: Uhm, I would say I used to be naive. I was, I had no problem with people and everyone is my friend and I'm happy-go-lucky. I am still like that, but now I'm more annoyed ... with stupid ...

I: And a little more cautious?

R: Yes, oh, but I do not want to sound negative, but I'm from the immediate opinion that a black person is a black person, but it's not, I know I have become a huge racist and I don’t think that I will change. I think there are many black people that I respect, that I work with now, that I met after the accident, that I realise, no, this man knows what he is talking about, but the majority irritate me, where before I pretty much was I, I had a mutual understanding and I was patient. Now, the moment I notice a black man is a bit stupid if he does not speak, articulate incorrectly or if I cannot communicate with him because he does not articulate, then, uhm, I do not have patience. Where previously I would have had patience. So I will not say I, all of them are bad. I'm just saying, that is, if someone talks to me for five minutes and he irritates me then I get annoyed quickly. But I, there are black people who I talk with and respect because I know when I talk to them, I can, they are on my level.

And

I: Oukei, uhm, so dis net gerig op swartmense, net op die spesifieke groep of is dit in die algemeen?

R: Ag, wel, wit mense het my nog nooit aangeval nie. Verstaan?

Translation

I: Okay, uhm, so it is only aimed at black people, just the specific group or is it in

| | |
|---|---|
| | general? |
| R: | O well, white people have never attacked me, understand? |

Respondent no.2's entire world did not become threatening following the violent crime, but her irritability and anger developed into prejudice towards a specific demographic group. This indicates a generalisation of characteristics from individuals within this group to an entire demographic group. This anger and irritability can be explained due to the fear and anxiety (e.g. fear for her life; fear of invasion of personal space) that the respondent felt subsequent to the violent crimes.

**Respondent no.3**

| | |
|---|---|
| I: | If you look at after the armed robbery, did the way you view the world change? |
| R: | No, because, ja just basically confirmed the way that I expected it. You kind of, like I say, you wait for it to happen one day because it is statistically known. So it's gonna happen to you at some point in your life. You're either one of the lucky ones where it only happens once or you're one of the unlucky ones where it happens twenty times. So … |

The third respondent already had a negative outlook of the world (a maladaptive and rigid schema) and felt that the event of violent crime affirmed her belief that the world is a dangerous place where you will become a victim of a crime. The fact that individuals are divided up into "lucky" and "unlucky" confirms the notion that she has maladaptive schema and applies black and white thinking.

The way in which the respondents view the world was affected in different ways, indicating that the effect of violent crime on an individual's view of the world is unique to each individual, depending on their previous cognitive schemas, beliefs and experiences. In addition to this, this research found that an individual's view of the world is negatively affected by the experience of a violent crime, unless the view of the world is already negative. In the latter the extreme schema was confirmed and entrenched deeper in the individual's way of interpreting their world.

### 6.6.1.2 Changes in an individual's schemas concerning how they view themselves

When an individual's core cognitive schemas regarding the world are altered, the way in which they see themselves in relation to this "new world" also changes. In this study the respondent's cognitive schemas about themselves were affected differently. Two of the respondents adjusted their schema in order to assimilate their new experience of violent crime, which negatively affected the way they viewed themselves, whereas the third respondent's negative view of herself was confirmed. The following extracts from interviews verify this finding:

**Respondent no.1**

I: Het dit dan, want jy sê dit het jou uitkyk op die wêreld dan negatief geaffekteer. Het dit jou uitkyk op jouself geaffekteer?

R: So bietjie. Ek, ek voel ek kon, wel, dis stupid maar, nie die deur oopmaak nie, in die eerste plek. Daar was net een ou en ek's seker hy sou dit nie sien kom het as ek sy rewolwer gegryp het en hom 'n shot op die neus gegee het nie. Soms, partykeer voel ek ek kon bietjie meer aksie geneem het of minder aksie geneem het. Maar daai simpel middeweg wat nou daar was is nie die antwoord nie. Presies al die skade aangerig wat ek nie wou hê nie.

I: So na die insident, hoe kyk jy dan na jouself? Is dit dan as iemand wat nie aksie neem nie?

R: Nee, ek dink juis as iemand wat in 'n stupid geval nie voorbereid was nie. Nou is ek voorbereid om aksie te kan neem. Hetsy aktief of passief. Vermy of baklei.

I: En hoe vergelyk dit dan met die beeld wat jy voorheen gehad het? Hoe het jy jouself dan voorheen gesien?

R: Voorheen het ek so bietjie van 'n invincibility ding aan die gang gehad. Ek dink dis hoekom ek in die eerste plek uitgegaan het. Kyk wie wil oor my drumpel trap. Nou's dit bietjie stiller.

Translation

I: Did it, because you say it negatively affected the way you view the world, has it affected the way you view yourself?

R: A little. I, I feel I could, well, it's stupid but not open the door in the first place. There

was only one guy and I'm sure he would not have seen it coming if I grabbed his gun and gave him a shot on the nose. Sometimes, sometimes I feel I could have taken a little more action or taken less action. But that simple compromise that is there now was not the answer. All the damage inflicted that I did not want.

I: So after the incident, how do you view yourself? Is it as someone who does not take action?

R: No, I think just as someone who, in a stupid instance, was not prepared. Now I am prepared to take action. Either active or passive. Flight or fight.

I: And how does that compare to the image you had before? How did you see yourself before?

R: Previously, I had a bit of an invincibility thing going. I think that's why I went out in the first place. See who wants to step on my doorstep. Now it's a little quieter.

**Respondent no.2**

I: So dit het ook verander hoe jy jouself dan sien? Jy sien jouself as iemand wat vinniger kwaad raak of vinniger geïrriteerd raak.

R: Ja, ek weet. Ek weet dis hoe ek is, en dit pla my nie rêrig nie. Ek wil nie te doen hê met mense wat my nou, ja …

Translation

I: So, did it also change how you view yourself? Do you see yourself as someone who gets angry faster or irritated more quickly?

R: Ja, I know. I know it is how I am, it doesn't really bother me. I don't want anything to do with people who, yes …

Respondent no.1 and Respondent no.2 now, respectively sees themselves as vulnerable and aggressive. This altered view of the self has a more negative undertone than the way they viewed themselves prior to their experience with a violent crime. This is in contrast with Respondent no.3. As she already viewed herself in a negative and critical way, her experience of a violent crime only confirmed her extreme and rigid beliefs.

**Respondent no.3**

I: Did the way that you view yourself change afterwards?

R: No, I don't think anything could do that.

I: Ok, that's good.

R: I'm my own worst enemy.

### 6.6.1.3 The effects of the changes in the way the world and the self is viewed: Loss in a sense of community

The results of the data analysis indicate that individuals may experience and express anger, resentment and fear towards other individuals following a violent crime. These individuals may be someone close, such as a neighbour, or an entire social or ethnic group. Both of these cases were represented within the data collected as is evident from the following extracts:

**Respondent no.1**

**R**: Ek was, ek was kwaad gewees vir die ander mense wat daar gebly het, want toe daar vir my gesê was ek moet by die trappie afloop, hulle gaan by die huis ingaan, toe het ek dadelik goed gevrees soos verkragting en sulke tipe goed. En ek het na die bure gehardloop wat grootoë deur hulle badkamervenster geloer het, nadat hulle die ouens suksesvol kon afdryf met 'n vuurwapen, wat ek later uitgevind het. En ek het hulle gevra: "het julle 'n vuurwapen? Hulle is in die huis alleen saam my vriendin. Ek wil nie hê iets sleg moet gebeur nie. Het julle vir my 'n vuurwapen?" En hulle het gesê: "nee". Hulle het in die huis gesit met 'n vuurwapen in hand, terwyl hulle vir my sê: "nee". En dit het my kwaad gemaak, want hoekom sal jy so selfsugtig wees om jouself te beskerm, sonder om my te help om iemand anders te beskerm?

**I**: Jy't gevoel asof jy op jou eie gelaat is?

**R**: Ja, eie en wat ook al gebeur is nou maar wat gebeur. Hulle wil niks daarmee, is nie gewillig om te help nie. Terselfdetyd was daar ander bure. Dis drie groepe mense wat in die eiendom gebly het. Die ander mense het, het vir my gesê hulle het vir die inbrekers gesê: "Nee, daar is niks. Dit is net 'n stoorkamer daardie." En die deur het moeilik oopgemaak na die woonstel toe. So hulle het hom probeer en hy het nie oopgegaan nie. So as ek nie uitgekom het nie, sou hulle nie geweet het daar was

iemand daarbinne nie. So, ek's bietjie kwaad oor daai en teleurgesteld in die ander mense wat nie wou help nie. En dit het ook vir my 'n ander ding geskep wat besef het, hoor hier, niemand gaan jou help nie. As jy iets wil gedoen kry of as jy jouself wil beveilig, jy moet self aksie neem.

**I**: So daai sin van gemeenskap is heeltemal verbrokkel by jou?

**R**: Ja.

**I**: En waar jy nou bly in jou kompleks? Het jy nog dieselfde gevoel?

**R**: Dis baie meer anoniem hier. Die buurvrou se naam kan ek net-net onthou en ek's al ses jaar hier. Die vorige bure was die persone wat by my ingebreek het, so die gemeenskap hier was nooit regtig bevestig nie.

**I**: En die buurvrou, wat jy al ses jaar langs haar bly, voel jy dat jy haar kan vertrou of is jy maar nog bietjie op 'n afstand oor jou slegte ervaring?

**R**: Nee, ek seker ek kan haar vertrou. Ek weet nie of ek op haar kan staatmaak in so 'n situasie nie, maar dis nie dat ek haar wantrou of dink sy's boosaardig of so iets nie.

Translation

**R**: I was, I was angry at the other people who lived there, because when I was told to go down the steps, they are going to go into the house, I immediately became concerned about rape and that type of thing. And I ran towards the neighbours, who watched with big eyes through their bathroom window, after they could get rid of the guys successfully with a gun, as I later found out. And I asked them: "Do you have a firearm? They are alone in the house with my girlfriend. I don't want anything bad to happen. Do you have a firearm for me?" And they said: "no". They sat in their house, firearm in hand, while telling me: "no". And that angered me, because why would you be so selfish to protect yourself without helping me to protect someone else?

**I**: You felt as if you were left on your own?

**R**: Yes, own and whatever happens now is what will happen. They don't want anything to do, are not willing to help. At the same time there were other neighbours. Three groups of individuals lived on the property. The other people told me that they told the thieves: "No, there is nothing. That is just a storeroom." And the door to the flat struggled to open. So they tried and it did not open. So if I didn't go out they would not have known there was anyone inside. So, I'm a little bit angry about it and disappointed in the other people who didn't want to help. And it started another thing that made me realise, listen here, no one is going to help you. If you want something done or if you want to protect yourself, you have to take action yourself.

| | |
|---|---|
| **I**: | So you completely lost that sense of community? |
| **R**: | Yes. |
| **I**: | And where you live in your complex now? Do you still have the same feeling? |
| **R**: | It's much more anonymous here. I can just remember the neighbour's name and I've been here for six years. The previous neighbours were the individuals who broke in here, so the community was never really established. |
| **I**: | And the neighbour, the one who has been living next to you for six years, do you feel that you can trust her or do you still keep your distance following your bad experience? |
| **R**: | No, I'm sure I can trust her. I don't know if I can rely on her in a situation like that, but it's not that I distrust her or think she is evil or something like that. |

This extract indicates that the individual experienced anger and resentment towards his neighbours following their unwillingness to assist him. It is important to note that the sense of anger towards neighbours persist, even if there is contradictory evidence that other neighbours tried to protect the individual. This sense of anger towards others transforms into distrust, which is not only directed towards neighbours at the time of the incident, but also towards neighbours that the respondent may have in the future. This distrust, in turn, leads to the individual forming poor social relationships with those around him.

**Respondent no.2**

| | |
|---|---|
| **I**: | En voel jy dat die robbery jou persoonlike verhoudings of jou sosiale verhoudings geaffekteer het? |
| **R**: | Uhm, ek dink so, ja, want voorheen was ek nie rassisties nie en voorheen het ek, uhm, maklik met swartmense gesels en gesit en ek sal hulle net aanvaar het en ek het swart vriende gehad. Nou, nou stel ek nie meer belang nie. So ek weet nie almal is sleg nie, maar ja. |
| **I**: | Maar dis vir jou moeilik? |
| **R**: | Ja, ag, dis nie moeilik nie. As ek, as ek nou êrens is in 'n restaurant en daar's swart mense sal ek met hulle gesels en nice wees, maar ek sal nooit 'n verdere band, soos 'n vriendskap sal wil aanknoop nie. Ja. |

Translation

**I**: And do you feel that the robbery affected your personal relationships or your social relationships?

**R**: Uhm, I think so, yes, because I wasn't racist before and before I, uhm, could easily sit and talk with black people and I would have just accepted them and I had black friends. Now, now I am not interested anymore. I know everyone isn't bad, but yes.

**I**: But it is difficult for you?

**R**: Yes, oh, it's not difficult. If I, now if I sit in a restaurant somewhere and there are black people I will chat with them and be nice, but I will never have any further relationship, like a friendship. Yes.

This extract indicates that this respondent experiences fear and distrust with regards to the entire racial group that the perpetrators are a part of. These feelings are presented as indifference and it is evident as individuals of the ethnic group are kept at an arm's length in order for the individual to feel protected and safe.

It became clear that these individuals' social relationships were affected by their experiences of violent crimes. It is interesting to note that the distrust of others did not remain directed towards only the people involved, but it became a general feeling of distrust towards all others associated with the incident. In a study on the social relationships of women in high crime areas, Linares (2004) found a wide range of social relationships, varying from social isolation to social cohesion, but only the foremost could be verified within this study.

#### 6.6.1.4 Conclusion of Theme 1

From the data collected it is important to note that there is a correlation between the individuals' cognitive schema about the world in general and their cognitive schema about themselves. Consequently, if one is affected negatively it will affect the other in a similar manner. However, if an individual's schemas were negative, rigid and extreme prior to their exposure to a violent crime; these schemas will be confirmed and will only deepen the individual's negative beliefs and subsequent experiences. It is evident that if an individual's cognitive schemas were affected negatively they

affected the individual's ability to create and maintain social relationships. For example, if an individual views themselves as vulnerable, following the crime, and views the world as a dangerous, unpredictable place they will be less inclined to create and sustain meaningful social relationships with those around them. It was also found that the respondent's negative view regarding others sustained, even when they were confronted with contradictory evidence.

### 6.6.2 Theme 2: Lasting posttraumatic symptoms that persist without meeting the criteria for PTSD.

Nine lasting symptoms were evident from the interviews with the respondents more than a year following their traumatic incidents. They represented Criterion B, C and D of PTSD symptomology as specified from the DSM-IV-TR (APA, 2000, p.468). All of the symptoms were not present in all of the participants. The symptoms present include persistent dreams; psychological distress at exposure to internal and external cues that symbolise or resemble an aspect of the traumatic event; physiological reactivity to internal and external cues that symbolise or resemble an aspect of the traumatic event; efforts to avoid activities, places or people that arouse recollections of the trauma; restricted range of affect; efforts to avoid thoughts, feelings, or conversations associated with the trauma; hypervigilance; irritability or outbursts of anger; as well as an exaggerated startle response. Each of these nine symptoms will be examined briefly.

#### 6.6.2.1 Persistent dreams

The symptom of persistent dreams was only present in one respondent. The dreams are not from her recent attack of an aggravated robbery, but from an armed robbery that she had experienced at the age of seven. In the following extract she indicates the presence of dreams and nightmares:

**Respondent no.2**

**I**: Jy kry nooit meer flashbacks of dat dit in jou kop inkom dan probeer jy dit vermy nie?

**R**: Ag nee, dis net as ek in 'n gesprek is in 'n sosiale opset en iemand noem iets, dan onthou ek wat met my gebeur het. Want dit lei mens maar terug na dit toe. Maar, nie op my eie nie, nee. Maar mens kry mos maar drome van kleintyd af as gevolg van die vorige aanvalle. Soos van dit, ek dink, soos ek nou-nou gesê het. Omdat ons, omdat hierdie nie so, al hoekom hierdie erg is, is omdat dit my hangertjie is, wat iets vir my beteken het. Maar ons is al voorheen, verskeie gevalle, erger aangeval by ons huis en van dit kry ek nog nagmerries, maar nie …

Translation

**I**: You don't get flashbacks anymore or it pops into your head that you try to avoid it?

**R**: Well, no, just when I am in a conversation in a social situation and someone mentions something, then I remember what happened to me. Because it leads a person back to it. But not on my own, no. But I still experience dreams from childhood due to the previous attacks. From it, I think, like I said before. Because we, because this wasn't, the only reason why this is so bad is because it is my necklace that meant something to me. But we have been previously, in different attacks, attacked worse at our home and I still experience nightmares from that, but not …

Respondent no.2 still experiences nightmares of a traumatic event that occurred 22 years prior to this interview. This is not an isolated incident as Goldstein (in Schreuder, Kleijn, & Rooimans, 2000) noted that war victims often report intrusive re-experiencing in dreams even more than 40 years following the original events. The fact that these nightmares are present so long after the incident support claims made by Galovski, Monson, Bruce, and Resick (in Cook et al., 2010, p.553), that "… PTSD-related sleep disturbances may endure even as other posttraumatic symptoms resolve."

#### 6.6.2.2 Intense psychological distress at exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event

Intense psychological distress, as experienced by the research participants, was observed in two distinct ways. In the first instance, one respondent experienced intense anxiety when he was confronted with a situation that was deemed similar to

the experience of violent crime. According to Ehlers and Clark (2000) this occurs because individuals with posttraumatic symptoms have intense perceptual priming for stimulus that they come across shortly before and during the traumatic event. They also noted that there is a processing advantage and reduced perceptual threshold for these stimuli. Cues that are connected to the traumatic event therefore activate memories of the trauma, due to the fact that inhibitory effects of explanation or incorporation into context is absent, and are more prone to be observed. The psychological distress was thus evoked from external cues that resembled aspects of the traumatic event, as is reflected in the following extract:

**Respondent no.1**

**R**: Ja, daar was by my huidige huis ingebreek en daai oomblik wat ek my sleutel in die deur wou sit en sien daar was ‘n sleutel van binne af ingesit, was ek dadelik in dieselfde situasie gewees. Ek was bewus van waar hulle dalk af mag kom en dadelik vir die vriendin gesê gaan klim terug in die kar. Sulke goeters.

Translation

**R**: Yes, there was a break-in at my current residence and at that moment when I wanted to put my key into the door and discovered there was a key inserted from the inside, I was immediately in the same situation. I was aware of where they may come from and immediately told my girlfriend to climb back into the car. Things like that.

In the second instance, extreme psychological distress was evident in the way in which respondents spoke about their traumatic events. The individuals spoke quickly, did not complete sentences and struggled to speak in a logical, articulate and coherent manner. This may be ascribed to their experience of intense anxiety when they were faced with external (e.g. questions asked) and internal (e.g. reliving the traumatic event while explaining it) cues during the interview. This phenomenon is illustrated in the following extracts from all three respondents:

**Respondent no.1**

R: En ek wat natuurlik nie, ek dink nogsteeds dis die jeugdiges wat kom droogmaak … uhm … stap ewe buitentoe en kry toe 'n graaf en, dit was nie 'n graaf ek het 'n vurk gekry, wat op die stoep gestaan het. En toe ek aan hom vat toe is daar 'n ou, reg om die draai, met 'n rewolwer. Hy sê toe vir my ek moet die ding neersit. Ek sit dit toe neer. Vra vir my of ek alleen is. Ek sê vir hom: "nee, daar is nog iemand binne". Vra vir my beursie en selfoon.

Translation

R: And I who of course not, I still think it is youths coming to cause mischief … uhm … walk outside and pick up a shovel and, it wasn't a shovel I got a fork that stood on the veranda. And when I touched it there was a guy, right around the corner, with a revolver. He told me to put the thing down. I put it down. Asked me if I was alone. I said: "no, there is someone else inside". Asked for my wallet and cell phone.

And

R: Ja, eie en wat ook al gebeur is nou maar wat gebeur. Hulle wil niks daarmee, is nie gewillig om te help nie.

Translation

R: Yes, own and whatever happens is what happens. They did not want anything, is not willing to help.

**Respondent no.2**

R: 5 minute. Dit was baie vinnig, want ek het by die, ek het gestop agter 'n bus by die rooi lig het net rooi gegaan en toe ek weer in my kar klim, of wat ookal, toe was, toe was die lig groen. So dit het gebeur tussen rooi en groen, so dit was seker maar 5 minute, ja.

Translation

R: 5 minutes. It was very quick, because I had at the, I stopped behind a bus at the red light it just turned red and when I climbed back in my car, or whatever, it was, it was a green light. So it happened between red and green, so it was probably about 5 minutes, yes.

And

R: En ek, 'n, Bloedstraat was vrek besig, so ek het gery en agter 'n bus gestop toe dit rooi lig was en daar was vrek baie karre om my, soos in albei kante en agter my, so ek kon nie vorentoe of agtertoe ry met die kar nie. En toe't 'n klein swart man, 'n jongerige outjie, nie jonk, so agtien, negentien, uhm, ewe skielik omgehardloop en sy hand in die ruit ingedruk en my nek gegryp en, uhm, my begin verwurg en met die ander hand het hy die deur se, se knoppie oopgetrek. Maar in hierdie proses, hy't eers my, hy't my hangertjie van my nek af probeer ruk, maar toe, toe ek dit sien, toe begin ek hom slaan teen sy arm en dit is toe hy my met sy hand gryp om my keel.

Translation

R: And I, a, Blood Street was very busy, so I drove and stopped behind a bus when it was a red light and there were many cars around me, like on both sides and behind me, so I couldn't drive forward or backward with the car. And then a small black man, a youngish fellow, not young, about eighteen, nineteen, uhm, suddenly ran around and stuck his hand in the window and grabbed my neck and, uhm, started choking me and with the other hand he pulled the door's, door's button open. But in this process, first he had my, he tried to pull my chain from my neck, but then, but when I saw this, I started hitting him against his arm and that is when he grabbed me with his hand around my neck.

**Respondent no.3**

R: Okay, ja he was packing, packing the food in the cupboard and I walked around the coffee table to switch the TV on and opened. The door flew open and it sounded like a gunshot, I, I don't really remember if it was a gunshot or not. 'Cause there was

nothing left behind to show that it was a gunshot, but it sounded like a gunshot. Anyway, they came inside, there were four guys. Darker African than usual, so I don't think they were actually from South Africa. Uhm, and then, basically, told us to get on the ground, tied us up with our TV cable and, you know, like the area cable and whatever.

It is interesting to note that these difficulties in verbalisation mostly occurred while the respondents were relaying information about the violent crime itself. This indicates the on-going emotional distress that the individuals experience, even years following the incident. The researcher hypothesises that this may also occur due to the fact that the participants have not received any type of therapeutic intervention subsequent to their experiences of violent crime. This assumption is corroborated by studies by Van der Minnen (in Ehlers et al., 2004) that indicated that an individual's narratives may turn out to be more structured with exposure treatment.

#### 6.6.2.3 Physiological reactivity on exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event

All three respondents experienced physiological reactivity while they were providing information about the violent crimes that they have experienced. The following extracts indicate how each individual was affected:

**Respondent no.1**

**I**: Oukei. Uhm. As jy aan die gewapende roof dink, laat daai gedeelte jou nog altyd angstig voel?

**R**: Net 'n bietjie, nie vreeslik nie.

**I**: Oukei, as jy sê 'n bietjie, hoe weet jy? Of waar in jou liggaan voel jy dit?

**R**: Ek dink dis so 'n ongemaklike gevoel in die kern, wat jou, asof jy meer alert laat dink as jy daaraan dink. Outomaties. Maar dit gaan gou weer verby. Ek was baie erg gewees. Daar was weke gewees waar ek in die nag nie kon slaap nie. En elke geluidjie het my, het ek opgespring en gaan kyk wat gaan aan. So met die tyd het dit vervaag, en, veral toe ek van daaraf weggetrek het hierna toe, Pretoria toe. Toe is dit feitlik heeltemal weg. Ek's nie meer gestres daaroor nie.

**I**: Oukei, en as jy nou sê, nou maar daaraan dink toe jy nou angstig was toe jy daaroor gepraat het. Is dit nogsteeds daar?

**R**: Dis nie soveel van ‘n angs as ‘n voorbereiding nie. Dit, uh, ek sal iets op ‘n ander manier benader as ek nou weer in die situasie is, dink ek. Glo ek. Maar dis meer daai gevoel van gereedheid wat nou op is.

Translation

**I**: Okay. Uhm. If you think about the armed robbery, does that part still make you feel anxious?

**R**: Just a little bit, not a lot.

**I**: Okay, if you say a little, how do you know that? Or where in your body do you feel it?

**R**: I think it’s an uncomfortable feeling in the core, that you, as if you think more observantly if you think about it. Automatic. But it passes quickly. I was very severe. There were weeks where I could not sleep at night. And every sound had me, had me jump up and I went to see what was going on. With time it went away, and, especially when I moved away from there to Pretoria. Then it was completely gone. I’m not stressed about it anymore.

**I**: Okay, and if you say, think about it when you were anxious when you spoke about it now. Is that still there?

**R**: It’s not so much anxiety as it is a sense of readiness. It, uh, I would approach it in a different manner if I was in the same situation again, I think. I believe. But it’s more a feeling of readiness that is over now.

And

**I**: Oukei. Die gevoel van gereedheid, ek wil net weer seker maak, is dit soos ‘n vinniger hardklop en vinniger asemhaling? Is dit ‘n fisiese gereedheid of is dit dan meer ‘n kognitiewe ding wat jy plannetjies maak?

**R**: Ek dink dis altwee. Die hart is so ‘n bietjie vinniger, asof die spiere op gereedheidsgrondslag is en jy’s bietjie meer oplettend. Sien skerper. Luister bietjie fyner.

Translation

**I**: Okay. The feeling of readiness, I just want to make sure, is it a faster heartbeat and faster breathing? Is it a physical readiness or is it more cognitive where you make plans?

**R**: I think it is both. My heart beats a little faster, as if the muscles are on standby and you are a bit more attentive. See sharper. Listen more finely.

And

**I**: Oukei. As jy dan geherhinder word aan die gewapende roof, waste emosies ervaar jy?

**R**: Seker, daar's angs. Bietjie angs. En, dis nie dat daar enige iets regtig anders is nie. Daar's nie regtig kwaad of bang wat opkom nie, dis net angs en daai super alertness. Wat amper frantic kan wees.

Translation

**I**: Okay. If you are then reminded of the armed robbery, which emotions do you experience?

**R**: Sure, there's anxiety. A little anxiety. And, it's not that anything else is really different. There isn't really fear or anger that comes up; it's just anxiety and that super alertness. That can be almost frantic.

**Respondent no.2**

**I**: So ek kan hoor jy sê dat jy kwaad word as jy hierdie vertel. Word jy elke keer kwaad as jy dit vertel?

**R**: Ja, baie.

Translation

**I**: So I hear you say that you become angry when you tell this story. Do you become angry every time that you tell it?

**R**: Yes, very.

And

**I**: So het jy enige, as jy daaraan herhinder word en jy voel bietjie meer startled, het jy ooit fisiese responses, soos klop jou hart vinniger en jy begin sweet?

**R**: Uhm, ek dink in die oomblik skrik ek en dan, natuurlik, sal mens se hart bietjie vinniger klop. Sodra ek besef, uhm, ek is net startled, dan relax ek weer. So dis maar net, dis normaal. As jy skrik, op daai oomblik, maar nie vir lank daarna nie, nee.

Translation

**I**: So do you have any, if you are reminded about it and you feel a bit more startled, do you have any physical responses like a faster heartbeat or do you begin to sweat?

**R**: Uhm, I think at that moment I get a fright and then, naturally, a person's heart beats a bit faster. As soon as I realise, uhm, that I am just startled, then I relax again. So it is only, it's normal. If you get a fright, at that moment, but not for long after it, no.

**Respondent no.3**

**I**: You've mentioned things like you won't drive home late at night and you don't want to be home alone, has it affected your behaviour in any other way?

**R**: Uhm … I must say sometimes, when, like I say, when you're home alone or you're coming home late, whatever, you do get that little bit of adrenaline spike or … I don't know if you know what I am talking about? It's like, just like that adrenaline feeling. Like you start getting nervous or anxious, uhm, you know, make sure you look around and maybe drive around the block one more time (laughs). But after, after, not really anything else.

All three respondents show physiological symptoms that may be explained by the excretion of adrenaline when the individuals re-experience the events as they describe them to the researcher. This is evident from their faster heartbeat, the tensing of muscles and hypervigilance. The physiological arousal felt by the participants is an automatic response which is short-lived as all three participants are able to calm down shortly afterwards.

#### 6.6.2.4 Symptoms related to the persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness

There are different types of avoidance symptoms found within the research data. The first is *avoidance of activities, places or people that arouse recollections of the trauma*. Two of the respondents (Respondent no.1 and Respondent no.3) moved into different residences following their experiences of armed robberies. Two of the respondents (Respondent no.1 and Respondent no.2) changed employment shortly following the incident and Respondent no.1 avoided using his outside patio as he was cornered there during his armed robbery.

The following extracts provide support for the finding of this type of avoidance:

**Respondent no.1**

**I**: Het jy na die insident opgehou om aktiwiteite te geniet wat voorheen vir jou lekker was?

**R**: Ek was, vir ‘n hele ruk lank, bang om op my eie stoepie te braai, waar presies was waar die rewolwer op my gerig was. Want dit was nou net daar op die straat gewees waar mense jou kan sien. So ek het dit vermy, maar dit was ‘n geïsoleerde geval.

Translation

**I**: After the incident, did you stop enjoying activities that you enjoyed prior to the incident?

**R**: I was, for a very long time, scared to braai on my own patio, exactly where the gun was aimed at me. Because it was right there on the street where people can see you. So I avoided it, but it was an isolated incident.

And

**I**: Het jy enige groot veranderinge in jou lewe gemaak na die gewapende roof.

Byvoorbeeld het jy getrek? Het jy …

**R**: Ja, ek het van dorp verander nie baie lank daarna nie. Kyk dit was vir my, ek het dit nie daar geniet nie, ek was semi-ongelukkig daar. Dit was net vir my die spyker in die kis.

**I**: So dit was vir jou ‘n confirmation dat jy daar moet uitkom?

**R**: Ja.

**I**: Hoe lank na die tyd het jy dan getrek?

**R**: Vier maande.

**I**: Oukei, so dit was glad nie lank gewees nie?

**R**: Nee, ek het oorgegaan in aksie in. Ek het ander werk gesoek, ander blyplek gesoek, feitlik dadelik. En dit het net so lank gevat om dit te kry.

**I**: En het dit jou gehelp?

**R**: Ja, ek was enorm rustig toe ek hierheen getrek het.

Translation

**I**: Did you make any big changes in your life following the armed robbery? For example, did you move? Did you …

**R**: Yes, I moved to another town shortly after the incident. Look for me it was, I didn’t enjoy it there, I was semi-unhappy there. For me it was the nail in the coffin.

**I**: So you took it as a confirmation that you had to get out of there?

**R**: Yes.

**I**: How long after the armed robbery did you move?

**R**: Four months.

**I**: Okay, so it wasn’t long at all?

**R**: No, I went over into action. I looked for other work, looked for somewhere else to live, almost immediately. And it only took that long to find it.

**I**: And did it help you?

**R**: Yes, I was immensely calmer when I moved here.

**Respondent no.2**

**I**: Dit het gebeur terwyl jy besig was om te werk. Het dit dan jou vermoë om te werk geaffekteer?

**R**: Wel ek het, ek het my werk gelos twee maande, ‘n maand of twee daarna, toe het ek nou by ‘n nuwe plek begin werk.

| | |
|---|---|
| **I**: | Oukei, en met dieselfde dat jy ook moet rondry? |
| **R**: | Ja, dis, dis dieselfde tipe werk, maar, uhm. Ja, ek dink dit het iets, dit was iets met die werk, maar ek wou nie meer, dit het my, ag ja, ek wou toe nie meer daar werk nie. |

Translation

| | |
|---|---|
| **I**: | It happened while you were busy working. Did it, then, affect your ability to work? |
| **R**: | Well I did, I left my work two months, a month or two afterwards, then I started working at the new place. |
| **I**: | Okay, and the same that you also have to drive around? |
| **R**: | Yes, it's, it's the same type of work, but, uhm. Yes, I think it has something, it was something with the work, but I didn't want to anymore, it made me, oh well, I didn't want to work there anymore. |

**Respondent no.3**

| | |
|---|---|
| **I**: | How soon after that did you move? |
| **R**: | Literally the same night. I moved out the night we got armed robbed. |

The second type of avoidance symptoms that were present in the data was *a restricted range of affect* as displayed by Respondent no.3. It is important to note that although the individual showed a restricted range of affect when talking about the incident, there were various times when it became apparent that she still finds it distressing.

**Respondent no.3**

| | |
|---|---|
| **I**: | Are there, while you're telling the story, are there still times when you start to feel anxious or angry or upset? |
| **R**: | No. |
| **I**: | Okay. |
| **R**: | I don't even think about it. It's something that's just happened. As far as I'm concerned it was just like, okay well, it happened. Just another thing that happened. |

And

**I**: Do you feel it helps you to talk about it?

**R**: Not really. I don't feel anything about it. It's not, it's like, it's like just one of those things that you put at the back of your head and go: "okay", you know? You move on.

And

**I**: Okay. Are there times when you are still reminded of the armed robbery?

**R**: Never.

Flack et al. (2000) describes this phenomenon by stating that emotional numbing and hyperarousal problems are reciprocally interactive. For example, individuals who suppress their emotional reactions to suggestive stimuli exhibit higher arousal. In addition, Levenson and Ruef (in Flack et al., 2000) found that expressive behaviours that are muted or ambiguous, or that reflect disinterest and detachment, are less likely to elicit empathetic responses from significant others, which may affect problem-solving abilities and exacerbate stress.

The third type of avoidance symptom is the effort to *avoid thoughts, feelings, or conversations associated with the trauma*. This was presented in three different ways: Firstly, as is evident from the following extract, this individual avoided any thoughts associated with the incident:

**Respondent no.3**

**R**: (Laughs) Ja. It's easier, I suppose, to stick it in file 13 and never think about it ever again. You know what I mean?

Secondly, Respondent no.2 and Respondent no.3 avoided their feelings with regards to the injuries they suffered during their experiences with violent crime. This is evident by their minimisation of the injuries suffered or by the denial that they were injured as is illustrated by the following extracts:

**Respondent no.2**

**I**: Hoe't hy jou geslaan? Waar't hy jou geslaan?

**R**: O, ag maar net, soos teen my nek en gesig en skouers, so maar die bokant. En met die een hand en met die ander hand het hy die necklace die heeltyd geruk, so die necklace het merke in my nek gemaak, laat my nek bloei.

**I**: Joeg. Het jy enige ander beserings gekry?

**R**: Uhm, nee. Dit was net dit.

Translation

**I**: How did he punch you? Where did he punch you?

**R**: O, just only, like against my neck and face and shoulders, so just the top parts. And with the one hand and with the other hand he constantly pulled at the necklace, so the necklace made marks in my neck, made my neck bleed.

**I**: Wow. Did you suffer other injuries?

**R**: Uhm, no. That was it.

And

**I**: Oukei, uhm, so jy het seergekry. Hoe het dit jou laat voel dat hierdie ou jou geslaan het?

**R**: Uhm, ek was meer kwaad omdat die necklace iets beteken het. Dit was 'n geskenk van my pa en my pa is oorlede, so dis nie iets wat ek kan vervang nie, so dit maak my kwaad dat hy, dat hy, dat hy my sal seermaak om iets by my te vat wat iets vir my beteken. Want iemand wat arm is moet weet wat sentimentele waarde is, maar dat hy so min omgee vir enige mens om hom is, ek was baie kwaad. Ek is baie kwaad en ek is 'n baie groot rassis nou daarna. Nie omdat, net oor dit nie, want ek verstaan dat daar mense is wat arm is, maar daar is sekere goed wat sentimenteel is en sekere goed nie. So iemand wat nog respek het vir iemand anders sal 'n, jou radio steel of jou foon vat, want dis nie sentimenteel nie, dis net geld, verstaan, so …

Translation

**I**: Okay, uhm, so you were injured. How did this man punching you make you feel?

**R**: Uhm, I was angrier because the necklace meant something to me. It was a gift from my dad and my dad is deceased, so it's not something that I can replace, so it makes me angry that he, that he, that he will hurt me to take something from me that means something to me. Because someone who is poor should be aware of what sentimental value is, but that he cares so little for anyone around him is, I was very angry. I am very angry and I am a very big racist now, afterwards. Not because, not only because of this, because I understand there are poor people, but there are certain items that are sentimental and certain items are not. So anyone who still has respect for another would steal your radio or take your phone, because it is not sentimental, it's just money, understand, so …

Respondent no. 2 minimises her injuries, although she was punched in the face and upper torso and her neck had marks where it was cut by her necklace. She minimises these injuries even though she went to great lengths afterwards to hide them. This indicates an effort to avoid her true feelings as the thought of being physically hurt may be too anxiety provoking for the respondent.

**Respondent no.3**

**R**: You, you feel violated and, and your personal space is taken up and, uhm … you, you battle to sort of trust things that are happening around you. 'Cause it's such a surreal experience. Sort of, you know, is this really happening? You know? You can't actually believe that it is, is happening. But I think that the gratefulness of something actually, physically happening, you know, nothing physically actually happened to us, like they didn't hurt us in any real way. They didn't cut us or cut off our fingers for rings or … You know what I mean? I think you're so grateful that you got out of the experience without actually being hurt, that the rest doesn't really matter.

Respondent no.3 made this statement shortly after describing that she was slapped by one assailant when she did not provide information with regards to the security systems that were placed in the motor vehicle. This extract indicates that she

completely denies being hurt, thus completely avoiding this anxiety provoking incident.

The researcher wondered if avoidance played a role in various individual's refusal to participate in the study and the researcher's subsequent difficulty in finding research participants. More specifically, the researcher wondered if the individuals experienced avoidance related to thoughts, feelings and conversations associated with the traumatic event. This assumption was made following individual's refusal to partake in the study, even years following their traumatic experiences. As mentioned earlier, three individuals refused to partake in the interview when they were approached by the acquaintances of the researcher.

The symptoms of avoidance in relation to traumatic events have been extensively researched. According to Andrews at al. (2012) survivors of psychological trauma draw on a number of avoidance mechanisms to protect themselves from memories and reminders of the traumatic event and the associated emotion. Dalgleish, Mathews, and Wood (in Andrews et al., 2012) proposed a multi-dimensional conceptualisation of avoidance that emphasised two important distinctions. The first distinction is between automatic and controlled avoidance. An example of automatic avoidance is psychogenic amnesia, which involves the involuntary inability to remember details about the traumatic event. Controlled avoidance entails deliberate attempts to avoid thinking about the traumatic event. The second distinction was between avoidance of emotion-related information and emotional feelings. For example, individuals may avoid emotion-related information about the trauma by trying not to talk about it or think about it, or through amnesia of details of the traumatic event. Individuals may also avoid emotional feelings by trying to not become upset, by bottling up their feelings, or by being unable to experience emotion, e.g. emotional numbing. Consequently, Dalgleish et al. (in Andrews et al., 2012) proposed a fourfold conceptualisation of avoidance that can be applied to the trauma domain. Firstly, there is automatic avoidance of emotion-related information, for example psychogenic amnesia. Secondly, there is automatic avoidance of emotional feeling, for example, emotional numbing. Thirdly, they proposed the controlled avoidance of emotion-related information, for example avoidance of reminders of the event and lastly the

controlled avoidance of emotional feelings, for example refusing to discuss feelings surrounding the event. Cohen and Roth (in Ullman, Townsend, Filipas, & Starzynski, 2007) reflected that the avoidant coping strategies of withdrawal and behavioural disengagement are associated with poorer psychological outcomes for trauma victims and may lead to the development and maintenance of posttraumatic stress disorder symptomology. It is therefore very important to assess if and how each individual expresses avoidance and to attain how this influences their daily lives.

#### 6.6.2.5 Persistent symptoms of increased arousal

According to Hamilton and Warburton (in Castillo, Fallon, C'De Baca, Conforti, & Qualls, 2002) for individuals suffering from PTSD, the intense arousal characteristic of the disorder interferes with information processing ability, compromising the individual's cognitive control of behaviour. Within this study there are three types of increased arousal present in the data namely: irritability and anger; hypervigilance; and an increased startle response. All of these persistent symptoms of increased arousal will be illustrated through extracts from the three research participants.

Irritability and anger

Both Respondent no.1 and Respondent no.2 experience irritability and anger following their incidents with violent crimes. Both participants' anger has become generalised and is consequently directed towards all individuals belonging to the same ethnic group as their assailants. This is evident in the following extracts:

**Respondent no.1**

**I**: Voel jy dat jy meer aggressief of irritable is na die insident?
**R**: Net met daai demografiese groep, ja.
**I**: Oukei, so dit is spesifiek op iets wat gekoppel is aan die insident?
**R**: Ja.

Translation

**I**: Do you feel more aggressive or irritable following the incident?

**R**: Just with that demographic group, yes.

**I**: Okay, so it is something that is specifically related to the incident?

**R**: Yes.

**Respondent no.2**

**I**: Op watse ander maniere het die robbery jou, ‘n impak op jou gehad?

**R**: Uhm, wel, ek is nogals ‘n groot rassis nou. Ek sal nie sê ek praat, ek haat almal nie, maar ek, ek raak vinniger kort van draad met swartmense sodra, soos ek agterkom hulle is bietjie dom of, ek verstaan nie wat hulle se nie. Waar voorheen het ek, uhm, baie geduld gehad om, veral met my werk, omdat ek ‘n sales manager is, toe het ek baie te doen met swartmense wat in die veld werk. En ek besef nou na dit is ek baie meer kort van draad met hulle as voorheen.

Translation

**I**: In which way did the robbery have a further impact on your life?

**R**: Uhm, well, I am a big racist now. I won’t say I speak, I hate everyone, but I, I get irritated with black people when, if I realise that they are a bit unintelligent or, I don’t understand what they are trying to say. Where previously I had, uhm, a lot of patience to, especially with my work, because I was a sales manager, I had a lot of contact with black people in the field. And now I realise I am more irritable than I was previously.

And

**R**: Uhm, ja. Ja. Maar ek, ek, ek besef ek raak baie kwaad as ek daaroor praat so dan hou mense nie daarvan as ek daaroor praat nie.

**I**: Oukei, so dis meer hulle wat ongemaklik voel as jy?

Translation

**R**: Uhm, yes. Yes. But I, I ,I realise I get very angry when I talk about it and subsequently people do not like it if I talk about it.

**I**: Okay, so the other people feel more uncomfortable than you?

Lee, Scragg, and Turner (in Stapleton, Taylor, & Asmundson, 2006, p.19) believed that rumination about the traumatic event, as is evident in these respondents, in which an individual dwells on questions such as "What could I have done to prevent it from happening?" or "Why did this happen to me?", appears to contribute to PTSD and persistent anger and guilt.

Hypervigilance

All three respondents show signs of hypervigilance following their experiences with violent crime. It is important to note that their hypervigilance has become second nature and they constantly take part in these activities, without any conscious effort to do so.

**Respondent no.1**

**I**: Oukei. Was daar of is daar nog tye wat iets jou herhinder aan die gewapende roof?

**R**: Soms is dit in 'n situasie is waar jy iemand verdink, jy weet, of nie weet of iemand skuilse planne het nie. Gaan dit vinnig weer in daai gereedheid in, waar voorheen sou ek hulle net geïgnoreer het en niks daarvan gedink het nie. Maar nou is daar 'n baie meer 'n bewustheid van wie is waar en wat het hulle in hulle hande en sulke goed.

**I**: Oukei, so jy is nogsteeds …

**R**: Soos as ek by die robot staan en een ou kom aan met een ou koerant dan verdink ek hom dadelik, want jy verkoop nie een ou koerant nie. Jy gebruik een ou koerant om iets te versteek mee.

Translation

**I**: Okay. Was there or is there still a time when something reminds you of the armed

robbery?

**R**: Sometimes it is in a situation where you are suspicious of someone, you know, or don't know if they have menacing plans. It quickly goes into that sense of readiness again, where previously I would have ignored them and would not have thought anything of them. But now there is a greater awareness of who is where and what they have in their hands and things like that.

**I**: Okay, so you are still…

**R**: Like if I stand at a robot and one guy comes towards me with just one newspaper then I suspect him immediately, because you don't sell just one newspaper. You use one newspaper to hide something.

And

**R**: Ja, ek sluit die deure en die kar. Hou dop om die kar vir iemand wat die kar bekruip of nader loop uit 'n ander hoek uit. Hou, hou 'n afstandspasie dat jy kan, vinnig die kar kan beweeg of manoeuvre as jy moet. Vorentoe of agtertoe soos wat die geval is.

Translation

**R:** Yes, I lock the doors and the car. Keep watch around the car for anyone wanting to attack the car or is moving towards it from another angle. Keep, keep a safe distance so that you, can quickly move or manoeuvre the car if you have to. Forward or backward as the situation requires.

And

**I**: Het dit enige van jou daaglikse habits verander?

**R**: Ek dink ek was bietjie meer bewus om dinge te sluit en oor die algemeen veiliger te wees oor dinge.

**I**: En is dit iets wat by jou gebly het?

**R**: Pretty much, ja.

**I**: Oukei. So wat sal jy dan doen? Jy sal seker maak als is gesluit?

**R**: Dubbel seker maak als is gesluit. Terwyl jy sluit so 'n ogie gooi oor die donker hoekie, kyk of iemand nie daar sit en wag nie. Sulke goeters.

**I**: Oukei. En soos wat jy nou-nou gesê het van die gereedheid, sal jy dan meer bewus

wees oor wat om jou aangaan en meer op die uitkyk wees?

**R**: Ja, en, soos byvoorbeeld, sal ‘n punt uit die huis gekies het waar die minste deur die venster gesien kan word. As jy iewers moet wegkruip gaan jy soontoe gaan. Sulke voorbereidinkies.

**I**: So jy maak klaar planne. Jy voel gereed vir die volgende keer sou dit weer gebeur?

**R**: Ja, of dis besig om te gebeur, hoe om dit te hanteer. Maklike en veilige bewegings.

Translation

**I**: Have you changed any of your daily habits?

**R**: I think I am more aware to lock things and to be safer in general.

**I**: And is that something that stayed with you?

**R**: Pretty much, yes.

**I**: Okay. So what will you do? Would you make sure everything is locked?

**R**: I would double ensure that everything is locked. While you lock look in the dark corners, see if anyone isn’t sitting and waiting there. Things like that.

**I**: Okay. And like you mentioned earlier about the sense of readiness, would you be more aware of your surroundings and be on the lookout?

**R**: Yes, and, for example, would choose a spot in the house where you can see the least through the window. If you had to hide anywhere you would go there. Preparations like that.

**I**: So you are already making plans. You feel ready if it should happen again?

**R**: Yes, or if it was happening, how to handle it. Easy and safe movements.

**Respondent no.2**

**I**: Het die robbery, het dit jou denke of jou konsentrasie of jou denkpatrone op enige manier geaffekteer?

**R**: Uhm, ek dink dit het my patroon, op ‘n, ja ek sal sê en, uhm, waar voorheen sou ek nie so oplettend gewees het teenoor mense om my nie is ek nou baie oplettend vir mense wat dalk vir my bietjie dodgy lyk. Waar ek voorheen nie geworry het nie.

**I**: Oukei, so jy’s meer bewus wat rondom jou aangaan?

**R**: Ja, meer bewus.

Translation

**I**: Did the robbery, did it affect your thinking or concentration patterns or thinking patterns in any way?

**R**: Uhm, I think it affected my pattern, on a, yes I would say, and, uhm, where previously I wasn't so attentive towards people around me I am now more observant of people who look a bit dodgy. Where previously I didn't care.

**I**: Okay, so you are more aware of what is happening around you?

**R**: Yes, more aware.

And

**I**: Oukei, het jy enige van jou gewoontes, as ons weer aan die robbery dink, het jy enige van jou gewoontes verander?

**R**: As ek bestuur, ja.

**I**: Ja?

**R**: Ja, as ek bestuur is ek nou meer attent op my kar. Ek ry nooit meer met my ruite oop nie, maak nie saak hoe warm dit raak nie. Ek parkeer, uhm, op ander plekke. Uhm, ja.

Translation

**I**: Okay, did you change any of your habits, if you think about the robbery, did you change any of your habits?

**R**: When I drive, yes.

**I**: Yes?

**R**: Yes, if I drive I am more attentive towards my car. I don't drive with the windows open anymore, no matter how warm it gets. I park, uhm, at different places. Uhm, yes.

**Respondent no.3**

**I**: Okay. Uhm … Do you still feel that it impacts your life?

**R**: O, ja. Now, I, I, I, I mean you're a lot more careful about what you do. Like I said, I, I

stop in the road, as opposed to pulling in my driveway and I make sure the, the, uhm … garage is open before I pull into it and that there is no one in there, so. And also, uhm … you know, you like don't stay on the phone with your window open or, uhm … you always check in your rear-view mirrors to see if anyone is near your car or, ja, so. You become a lot more cautious, yes.

**I**: So, you being cautious. It's not only in your home it is outside in your car as well?

**R**: O, definitely. Well, I drive around all day long, so, ja, you try to be as cautious as possible so that you're not a victim.

Kimble, Fleming, and Bannion (2013) stated that the hypervigilant process may be automatic and well-practiced, as was evident from these extracts. They were also of the opinion that hypervigilant cognitions and behaviours, such as suspiciousness and scanning for danger, may be harmful to an individual's functioning as they may lead to anxiety.

Increased startle response

Respondent no. 2 and Respondent no.3 showed an increase in their startle response following their experiences of violent crimes, as is indicated by the following extracts:

**Respondent no.2**

**R**: Ag, dis maar, ek is nou meer versigtig as ek bestuur in die sin van ek ry nie meer met oop ruite nie. Ek sluit my deure, ek maak seker ek sluit my deure. Ek, as ek bestuur is ek meer versigtig. Ek dink ek's ook meer, soos ek in die questionnaire geantwoord het, ek is, uhm, ek is vinnig startled in my kar, teenoor voor.

Translation

**R**: Oh, it's just, I am more careful when I drive like I do not drive with my windows open. I lock my doors and make sure I lock my doors. I, when I drive I am more cautious. I think I'm also more, like I said in the questionnaire, I am, uhm, more easily startled in my car as compared to earlier.

**Respondent no.3**

**I**: Do you scare more easily now?

**R**: O, yes. Definitely. Someone walked up behind me the other day, no, we were taking *baby's name* for a walk and there's this little boy that has befriended us and lives here in the area, I don't know where exactly he lives. But he sort of goes with us and comes around and, and then goes off and comes back again and, uhm … came up behind. I just didn't hear him. And he came up behind me and scared the living crap out of me. So, and I get very angry when people do that. So, but even before we were armed robbed, I don't like when somebody scares you on purpose 'cause I don't think it's a nice thing to do. But, ja I, I get easily scared.

Metzger, Orr, Berry, Ahern, Lasko, and Pitman (in Griffin, 2008) noted that individuals with a lifetime prevalence of PTSD symptomology, even without a current diagnosis of PTSD, show an abnormally large startle response.

### 6.6.2.6 Conclusion of Theme 2

Theme 2 dealt with various lasting symptoms that individuals experience following exposure to various violent crimes. As mentioned earlier, these symptoms are representative from Criteria B, C, and D of the diagnostic criteria for PTSD (APA, 2000, p.468).

Criteria B represent ways in which the traumatic event is constantly re-lived. Associated symptoms that were found in the data are recurrent distressing dreams of the event, severe psychological distress when confronted by internal or external cues represent aspects of the traumatic event as well as physiological reactivity to both internal- or external cues associated with the trauma. Criteria C entail unrelenting avoidance of stimulus related to the traumatic event and numbing of overall responsiveness. Symptoms represented in this criterion are efforts to evade feelings, thoughts or discussions related to the traumatic experience; efforts to steer clear of people, activities or places that provoke memories of the traumatic event; as well as a restricted range of affect. Criterion D includes persistent symptoms of increased

arousal and examples found in the data are irritability and outbursts of anger, hypervigilance and an exaggerated startle response.

When viewed collectively, the posttraumatic symptoms present in the data collected from all three participants nearly account for every criteria set out in the diagnosis of PTSD, with each individual experiencing at least four symptoms. This indicates the extent of the experience of posttraumatic symptoms as well as how these symptoms persist, even years following the traumatic incident.

### 6.6.3 Theme 3: The effect of more than one crime

When exploring the effects of more than one crime, the researcher did not only focus on the additional experience of a violent crime, but also included experiences relating to the occurrence of a non-violent crime. Both Respondent no.1 and Respondent no.3 experienced a second, non-violent crime following their armed robberies. Respondent no.1 was the victim of a break-in two years after the armed robbery whereas Respondent no.3 experienced theft of a cell phone a week following her violent incident. Respondent no.2 was the only individual who had experienced two violent crimes as well as non-violent crimes. The first incident was an armed robbery that took place when she was seven years old and the second incident was an aggravated robbery when she was twenty-nine. In between these two violent incidents she was the victim of house robberies, but was never present when they were committed.

The effect that a second crime has on an individual is mitigated by several factors, for example: the type of crime that was committed; the location of the crime; the period of time that lapsed between the two incidents; and the degree of violence experienced in both crimes all contribute towards the individual's experience and understanding of the crime. In the following two extracts the second crime was compared to the first and was interpreted as less severe:

**Respondent no.1**

**I**: En die huisbraak. Voel jy dat jy dit baie vinniger verwerk het as die gewapende roof?

**R**: Ja. Dit was, ek was weereens kwaad omdat my persoonlike spasie betree was, maar dit was baie vinniger oor. Toe die sekuriteitsstappe eers geneem is om seker te maak als is reg, toe is dit in 'n japtrap. Die feit dat ek weet wie dit was ook het gehelp.

Translation

**I**: And the break-in. Do you feel that you got over it quicker than you did the armed robbery?

**R**: Yes, it was, I was angry once again because my personal space was violated, but it was over quicker. When I took steps to secure my home and to make sure that everything is fine it was over in a flash. The fact that I knew who the perpetrators were, also helped.

**Respondent no.2**

**I**: Dink jy omdat jy deur so iets was dat jy die robbery makliker verwerk het?

**R**: Ek dink so, ja.

**I**: Oukei, want dit was nie vir jou so erg soos daai nie?

**R**: So erg soos daai nie, ja.

Translation

**I**: Do you think that because you went through something like that that you could resolve the robbery more rapidly?

**R**: I think so, yes.

**I**: Okay, because it wasn't as bad as it was?

**R**: Not as bad as it was, yes.

Respondent no.3 had a different experience of her second crime. Although the crime was theft, the fact that it happened so quickly after her armed robbery had a detrimental effect of her experience of it. She experienced the theft of her cell phone as severe as the armed robbery, as is illustrated by the extract below:

**Respondent no.3**

**R**: Ja, I was like, how can that happen to a person in such short space of time? The little girl sitting next to me completely freaked out. I was just like okay. It's gone. (laughs)

**I**: Did you feel that because you had the armed robbery a week before, that this wasn't so bad for you? Or did you feel that it was just as bad?

**R**: No, it was the same. It was just the same. It was all a shock, you know what I mean. It's like you don't expect it to happen at that very moment, but ja, after that I certainly don't speak on the phone without my window being closed. And I don't leave anything … well, mind you, I do leave things on the seat from time to time, but most of the time I don't.

**I**: Because they were so close together, do you sometimes forget about the phone being stolen? Or does it become like one incident for you in your head? Or is it …?

**R**: No, it's two separate incidents and they are quite vivid. You know what I mean? You kind of remember it exactly as it was.

It is important to look at the effect of revictimisation as it may have detrimental consequences, not only for the victim, but for society in general as is evident in the following findings. Menard, Mihalic, and Huizinga (in Fagan & Mazerolle, 2011) found that whereas the majority of individuals do not experience serious assault, those who do tend to be chronic victims rather than a one-time victim. According to Agnew (in Fagan & Mazerolle, 2011) this may be due to the fact that some victimisation experiences create noxious, unpleasant conditions that foster anger and retaliation responses, enticing the individual to partake in unsavoury, and occasionally illegal, behaviour.

Tseloni and Pease (2003) believed that victimisation is an excellent predictor of future victimisation. They noted two theoretical causes for their claim. Firstly, the successful completion of an initial crime renders an individual as vulnerable, which increases the probability of future victimisations. Secondly, individuals have constant chances of being victimised. This statement is not affected by their victimisation history, but rather because they are an attractive target compared to others. Whatever the reason, multiple victimisations have negative consequences for the individual. Adding to this,

Winkel, Blaauw, Sheridan, and Baldry (2003) stated that re-exposure to crime within a short time interval negatively influenced post-victimisation functioning.

### 6.6.4 Theme 4: Additional effects of violent crime not classified as posttraumatic symptoms according to the DSM-IV-TR

The respondents of this study indicated additional effects of the violent crimes they experienced. Although these effects are not recognised by the DSM-IV-TR as symptoms of PTSD, they have been discussed in the literature review and are seen as important as they affect the individuals' lives on a daily basis.

The first effect that will be explored is physical illness. The following extracts indicate how the respondents experience the effect of the violent crime on their physical health:

**Respondent no.2**

**R**: Na dit? Nee ek dink nie. Maar ek het mos begin van die jaar het ek chemo gehad op my skildklier. So hulle sê 'n skildklier wat aggressief raak is as gevolg van iets traumaties wat met jou gebeur, so die dokter het gesê hy dink die robbery en omdat ek so intens kwaad raak wat gebeur het as ek aan die situasie dink, uhm, dit het geaffekteer dat my skildklier aggressief geword het. Wat toe, en dit is hoekom ek nou permanent op skildklierpille is en so aan. So …

**I**: So dit het liggaamlik, biologies, 'n groot impak op jou lewe gehad?

**R**: Ja. Wel, dis maar, dis juis, dis wat hulle sê want ek het nooit voorheen met skildklier gesukkel nie.

Translation

**R**: After it? No, I don't think so. But in the beginning of the year I received chemo for my thyroid. So they say that a thyroid becomes aggressive due to a traumatic

| | |
|---|---|
| | experience that occurs, so the doctor said he thinks that the robbery and my subsequent intense anger when I think about the event, uhm, affected my thyroid in that it became aggressive. Which then, and that is why I now permanently have to take thyroid medication etc. So … |
| **I**: | So bodily, biologically, it had an enormous effect on your life? |
| **R**: | Yes. Well, it's just, that just, that's what they say because previously I never struggled with my thyroid. |

It is evident that this respondent blames the development of hyperthyroidism on her experience of a violent crime. The link between thyroid functioning and trauma is well established in research. For example, Mason, Mougey, Brady, and Tolliver (in Vermetten & Bremner, 2002) noted that thyroid stimulating hormone (TSH) has a range of actions which include energy utilisation within the cell and that stress results in long-lived elevations in thyroid functioning. They also noted that thyroid function tests are frequently abnormal, indicating hyperthyroidism, in individuals who present with PTSD.

**Respondent no.3**

| | |
|---|---|
| **I**: | Did you become more physically ill afterwards? Like get more headaches? Get more flu's? |
| **R**: | O, ja. Actually, funny enough that you should say that, I didn't know whether it was because of bad diet or bad health or whatever the case may be, but I do, I usually was very, very healthy before. |

According to Schonfeld et al. (in Norman et al., 2006) posttraumatic stress disorder appears to be linked to an increased risk for the presence of a physical illness more than any other anxiety disorder. PTSD has been associated with an increased susceptibility to infectious diseases and vaccine efficacy (Krnic et al., 2007); as well as greater absenteeism from work (Belleville, Marchand, St-Hilaire, Martin, & Silva, 2012).

The second effect is feelings of self-blame as represented by the following statements:

**Respondent no.1**

**I**: Het dit dan, want jy sê dit het jou uitkyk op die wêreld dan negatief geaffekteer. Het dit jou uitkyk op jouself geaffekteer?

**R**: So bietjie. Ek, ek voel ek kon, wel, dis stupid maar, nie die deur oopmaak nie, in die eerste plek. Daar was net een ou en ek's seker hy sou dit nie sien kom het as ek sy rewolwer gegryp het en hom 'n shot op die neus gegee het nie. Soms, partykeer voel ek ek kon bietjie meer aksie geneem het of minder aksie geneem het. Maar daai simpel middeweg wat nou daar was is nie die antwoord nie. Presies al die skade aangerig wat ek nie wou hê nie.

Translation

I: Did it, because you say it negatively affected the way you view the world, has it affected the way you view yourself?

R: A little. I, I feel I could, well, it's stupid but, not open the door in the first place. There was only one guy and I'm sure he would not have sees it coming if I grabbed his gun and gave him a shot on the nose. Sometimes, sometimes I feel I could have taken a little more action or taken less action. But that simple compromise that is there now was not the answer. All the damage inflicted that I did not want.

And

**I**: Dis goed. As dit jou gehelp het is dit regtig baie goed. Blameer jy jouself ooit vir die insident?

**R**: Dat ek, dat ek uitgegaan het, ja. Dat ek nie gedink het wat dit kan wees waarvoor ek nou gaan instep nie, ja. Ek blameer myself so 'n bietjie daarvoor.

Translation

**I**: That's good. If it helped you it is really good. Do you ever blame yourself for the incident?

**R**: That I, that I went outside, yes. That I didn't think what it could be that I am walking into, yes. I blame myself a bit for that.

**Respondent no.3**

**I**: Do you ever blame yourself for what happened?

**R**: No. I'm just, I just wish we had gotten away sooner. Like, we had moved sooner. Uhm, you know, obviously the signs were there and we didn't act upon the signs quick enough. But, then again, there are also other things involved like financially. Can you afford just to up and leave and move when your car try, when somebody tries to steal your car once or twice? You know what I am saying? It's, it's just not financially viable to live that way.

The experience of self-blame following a traumatic incident has been well established in literature and will be explored in the next chapter. It is important to note that within the new classification of PTSD in the DSM-5 (2013) self-blame has been included as a symptom, indicating that it was experienced by a vast amount of individuals who have been through a traumatic event and that it is significant enough to influence an individual's functioning.

### 6.6.5 Conclusion

This chapter explored the results gathered from the data that was obtained in this study. It commenced with the criteria for the selection of the research participants as well as the difficulties encountered while finding research participants. Due to these difficulties the researcher had to broaden the parameters of the study and, as a result, three individuals were selected to take part in this research. To ensure that they did not meet the criteria for posttraumatic stress disorder and could partake in the study the three individuals were asked to complete the PCL-S. Following this, each participant participated in a semi-structured interview and the data collected analysed and discussed. Overall four themes and various subthemes were identified. The themes included changes in the individual's cognitive schemas; lasting posttraumatic symptoms that persist without meeting the criteria for PTSD; the effect of more than one crime; as well as additional effects of violent crime not classified as posttraumatic

symptoms according to the DSM-IV-TR. All of these themes will be described in greater detail within the next chapter.

# CHAPTER 7:

# Conclusions and recommendations

## 7.1 Introduction

In this chapter the researcher will discuss the findings of the empirical research in relation to relevant literature. The problem statement made in Chapter 5 will be evaluated in relation to the findings made by the study. The conclusions of the study will be explored, the limitations of the study will be investigated and recommendations for future research will be made.

## 7.2 Discussion of findings

This study set out to explore the experience of residual, subclinical symptoms of PTSD that individuals display subsequent to their encounters with violent crime, specifically armed robbery, motor vehicle hijacking and assault with a deadly weapon, by means of a case study method. Five individuals were approached through convenience or purposive sampling and three research participants were selected after they did not meet the criteria for posttraumatic stress disorder, as assessed by the PCL-S. Each participant partook in a one-on-one semi-structured interview and thematic analysis was utilised to explore the data.

This study made five very important findings. **Firstly**, it found that a select number of participants who have experienced violent crimes do not only present with subclinical posttraumatic symptoms, but many still meet the requirements for a diagnosis of PTSD, even years following their experiences with traumatic events. This is not a novel discovery, as proven by the fact that eight percent (8%) of the adult populace in the United States have a lifetime prevalence of PTSD (APA, 2000). Shalev (in Dekel, Peleg, & Solomon, 2013) added that a significant sub-group of individuals who experience a trauma fail to recover and suffer enduring symptoms. The researcher found it significant that a high number of individuals still present with these symptoms years following their traumatic experiences. This study found that two out

of five individuals who were approached for this study met the criteria for PTSD and that does not include individuals who did not want to partake in the study because they found it too intimidating to speak about their traumatic experiences. In an explanation for this extensive prevalence of posttraumatic symptoms it is important to mention that generally, most individuals hold relatively positive core cognitions of themselves and the world (Taylor & Brown in Dekel et al., 2013) and that these cognitions are considered to remain stable throughout the individual's lifespan (Power & Dalgleish in Dekel et al., 2013). Due to its unpredictable, uncontrollable and extremely negative nature, a traumatic event may challenge these enduring cognitions. Given the intensity of the event, individuals may be unable to interpret their traumatic experiences as unique and unusual. Rather than assimilating trauma-related information into their existing cognitive schemas, accommodation may occur and core schemas are modified to incorporate a critical mass of inconsistent information (Foa & Jaycox in Dekel et al., 2013). This process and its related consequences lead to the development and preservation of chronic posttraumatic stress symptomology. This explanation leads us to the second finding of the study.

The **second** important finding of the research pertains to the changes of the individual's core cognitive schemas regarding themselves, their world and their relationships following the experience of a violent crime. Core schemas develop during childhood from our interactions with significant others and consist of global patterns of beliefs about ourselves, others and our environments. Core schemas operate at the most fundamental level of an individual's belief systems and gives rise to their intermediate beliefs (e.g. attitudes, rules and underlying assumptions) as well as influencing their perceptions of events (Price, 2007). These core schemas direct an individual's behaviour (Beck in Padesky, 1994) and determine what an individual notices, what they attend to as well as what they remember from their experiences (Hastie in Padesky, 1994). As mentioned earlier, most individuals develop relatively positive and flexible core schemas that allow assimilation of perceived material into pre-existing schema structures and facilitate adaption to new experiences (Price, 2007). When an individual is confronted with a traumatic experience, such as a violent crime, Janoff-Bulman (in Dekel et al., 2013, p.242) believes that an individual's higher-order cognitions are challenged as their rigid core schemas about the invulnerability of the self and the world become "shattered". As a result, rather

than believing in the "benevolence of the world", individuals may now view the world as a place where bad things happen and where people are uncaring (e.g. "there are all kinds of evil in different forms and different places" as quoted from Respondent no.1). Secondly, rather than believing in the "meaningfulness of the world" individuals may now view the world as an unjust and uncontrollable place, where awful events can happen to good people, and where individuals are unable to cope with threats and stress. Janoff-Bulman (in Price, 2007) believes that, following these experiences, an individual is thrown into a state of confusion, avoidance and hyperarousal with intrusive cognitions.

Foa and Cahill (in Foa & Rauch, 2004) proposed that for most individuals these negative cognitions are disconfirmed and therefore corrected through engagement in daily activities and processing of the traumatic memory, leading to the dissipation of the related PTSD symptomatology. However, there are certain conditions that may lead to the increase and preservation of PTSD symptoms. Firstly, an individual may be unable to assimilate their new traumatic experiences into their pre-existing cognitive schemas. Secondly, the individual may have pre-existing, rigid cognitive schemas that are unable to process the traumatic material effectively (Horowitz in Price, 2007). Lastly, individuals may avoid trauma-related thoughts and activities, causing the individual to develop and maintain the post-trauma negative cognitions. As PTSD is the result of a failure to 'complete' the processing of traumatic material. It is suggested that rigid cognitive schemas causes the traumatic material to remain in 'active' memory, resulting in PTSD symptomatology (Horowitz in Price, 2007).

The data gathered in this study validate these findings and also indicate that, depending on their pre-existing cognitive schemas and their specific experience of a violent crime, each individual's schema about the world is affected differently following a traumatic experience. The first respondent's view of the world was negatively affected as their previous belief about the world was shattered (as indicated by his statement: "…ek dink dit het my illusie dat die wêreld grootendeels goed is mooi ge-shatter", translated as "…I think that it shattered my illusion that the world is mostly good"), which left him feeling vulnerable in an unpredictable place. The second respondent's fear and subsequent anger was directed towards an entire demographic group and subsequently affected her behaviour towards this group

negatively. The third respondent already had previous rigid and extreme beliefs regarding the world and found that these beliefs were confirmed by the traumatic event. These changes in the way that the respondents viewed their worlds also affected how they viewed themselves. The first respondent now sees himself as vulnerable and ill-equipped to deal with dangers and constantly makes plans to ready himself for future attacks. The second respondent's view of herself changed and she now views herself as someone who is irritable and aggressive. The third respondent's view of herself, which was already extreme and rigid, was only strengthened by her view of herself as vulnerable.

The finding that an individual's self-concept and personal identity is altered following a trauma was supported by numerous researchers (Berntsen & Rubin in Jobson & O'Kearney, 2008; Janoff-Bullman in Dekel et al., 2013; Jobson & O'Kearney, 2008). Janoff-Bulman (in Dekel et al., 2013) believed that trauma can pose a threat to an individual's belief in their self-worth and may lead to the development of a negative self-image. The individual may start to see themselves as bad and deserving of ill-fortune. Berntsen and Rubin (in Jobson & O'Kearney, 2008) explained that self-change occurs because memories of the traumatic event are highly accessible and easily evoked, which leads to the trauma being seen as a major causal agent in the individual's life story and therefore a turning point in their lives. Jobson & O'Kearney (2008) added that turning points are typically culturally expected transitional events that provide self-definition or they may include a change in self-definition through role change, such as marriage, birth of a child or a change in career. The perception of the traumatic event as a turning point, together with the requirement for an internal consistency of the life story, results in the role of trauma victim or survivor becoming a salient and important component of the individual's identity. Similarly, Conway (in Jobson & O'Kearney, 2008) suggests that incongruence between the traumatic event and the individual's existing self-definition or identity motivates change. Conway continues that the self-system's reaction to a traumatic event is to lower the accessibility of memories to the event or to distort the existing memories. Over time, self-consistency needs to be maintained by altering the person's self-construct. This results in the development of a self-identity that is centred on being a victim to trauma or by emphasising self-change since the event. Using a self-defining memory task, Sutherland and Bryant (in Jobson & O'Kearney, 2008) found that individuals with

PTSD reported themselves as being more strongly defined or identified by their trauma than those who do not develop PTSD. In conjunction with this, Byrne, Hyman, and Scott (in Jobson & O'Kearney, 2008) stated that the degree to which the trauma memory was rated as important for self-understanding was positively related to the severity of symptoms on a PTSD checklist, indicating the widespread and lasting effects that the change in an individual's cognitive schema has on their functioning.

It is important to note that changes in an individual's core cognitive schemas do not only lead to changes regarding themselves, it also has an effect on the greater community as these changes affect how others are viewed. This research found that for two respondents, their negative schemas about the world negatively influenced their relationships with those around them, leading to a loss of a sense of community. This finding is congruent with previous research by Hill (in Linares, 2004) who found that individuals may isolate themselves in an effort to avoid contact with violence, indicating that their behaviour is ruled by fear. This fear of crime plays an important role in weakening social interactions among urban residents, as well as social cohesion and trust (Gibson, Zhao, Lovrich, & Gaffney in Joong-Hwan & Sangmoon, 2009; Palmer, Ziersch, Arthurson, & Baum in Joong-Hwan & Sangmoon, 2009). Fear of crime among individuals weakens their capability of informal social control over neighbourhood problems, eventually leading to withdrawal from community life (Bursik & Grasmick in Joong-Hwan & Sangmoon, 2009; Wilson & Kelling in Joong-Hwan & Sangmoon, 2009). In addition to this, fear of crime fosters suspicion and distrust, undermines popular faith and commitment to the area, limits routine activities, and undermines individual morale and the perceived effectiveness of taking any positive action (Skogan in Joong-Hwan & Sangmoon, 2009). The researcher is aware that fear of crime may also lead to social cohesion as was found by Joong-Hwan and Sangmoon (2009); Linares (2004) and Miethe (in Joong-Hwan & Sangmoon, 2009), but this finding could not be substantiated within this research.

The **third** important finding concerns lasting posttraumatic symptoms that individuals can experience, which are not sufficient to meet the criteria for a diagnosis of PTSD. Nine lasting posttraumatic symptoms were evident from the data gathered within this research. They represented Criterion B, C and D of PTSD symptomology as specified

from the DSM-IV-TR (APA, 2000, p.468) and not all of the symptoms were present in all of the participants. The symptoms present in the participants include persistent dreams; psychological distress at exposure to internal and external cues that symbolise or resemble an aspect of the traumatic event; physiological reactivity to internal and external cues that symbolise or resemble an aspect of the traumatic event; efforts to avoid activities, places or people that arouse recollections of the trauma; restricted range of affect; efforts to avoid thoughts, feelings, or conversations associated with the trauma; hypervigilance; irritability or outbursts of anger as well as an exaggerated startle response. Each of these nine symptoms will be discussed.

Only one respondent experienced the symptom of persistent nightmares. The content of her nightmares centred on an armed robbery that she experienced at the age of seven, twenty-two years prior to this research. The fact that the nightmares have persisted for this long is not uncommon, as war victims often report intrusive re-experiencing in dreams even more than 40 years following the original events (Goldstein in Schreuder, Kleijn, & Rooimans, 2000). Weiss (2007) credited the production of these nightmares to the amygdala, as it plays a central role in fear conditioning. Fundamental to this notion is the assumption that a neutral stimulus linked to with a traumatic event produces conditioned fear or a fear memory. Because the main function of a dream includes the processing of experience and memories, and nightmares often include content that includes feared outcomes, the amygdale-mediated fear memories will be expressed in dreams. In a study by Davis, Byrd, Rhudy, and Wright (2007) on the characteristics of chronic nightmares in individuals who have been exposed to trauma, nightmares were found to be associated with distress, including poor global sleep quality and fear of going to sleep. Relating to the fear of falling asleep, Craske, Lang, Tsao, Mystkowski, and Rowe (in DeViva, Zayfert, & Mellman, 2004) noted that the loss of vigilance during sleep is frightening to some individuals and may be related to a fear of the darkness. This fear was present in the respondent until the age of nineteen and only dissipated after she conditioned herself to sleeping with the lights off by incrementally extending the time she spent in the dark.

The second symptom entails re-experiencing the violent crime by demonstrating intense psychological distress at exposure to internal or external cues that symbolise

or resemble an aspect of the traumatic event. One respondent stated that he re-experienced the emotions, physical reactions and accompanying motor responses he experienced during his experience of a violent crime when he was confronted in a situation with similar cues. According to Brewin, Dalgleish, and Joseph (1996) re-experiencing symptoms are as a result of the manner in which trauma-related information are encoded, structured in memory and recalled. In order to describe the wide array of reliving symptoms, Ehlers and Clark (2000) focused on, amongst others, the memory processes of perceptual priming, which comprises of the improved capability to recognize objects as a result of previous encounters, and associative learning. These two processes underlie expectations about what stimulus the individual will come across and what will ensue thereafter. Jointly these processes make it probable that the individual will become aware of external stimulus (e.g. auditory or visual cues) or internal (e.g. posture, feelings and arousal) stimulus cues that are reminders of the trauma, and react to them with automatically triggered reliving symptoms. Baddeley (in Ehlers, Hackmann, & Michael, 2004) added that implicit memory traces are not very distinctive from other memory traces and, therefore, any indistinct physical resemblance would be adequate for the perception of stimulus as comparable to those present during the traumatic event. This indicated poor stimulus discrimination and may lead to the activation of intrusions, even if the situation in which the stimulus configuration is observed is dissimilar. As a result, when the respondent found himself in a situation that he, automatically, deemed as similar to the situation in which the armed robbery occurred, he experienced the same emotions, namely shock and anxiety, as he did then.

Ehlers and Clark (in Ehlers et al., 2004) observed that individuals who present with posttraumatic symptomology relive their emotions and sensory information related to the event, even if they acquire new information that contradicts their original impressions. According to Ehlers et al. (2004) this may contribute towards the lack of time perspective. The researcher hypothesises that this phenomenon may also contribute towards the long-lasting effects that a trauma has on an individual, as their original impressions may become resistant to change. This may result in the individual experiencing psychological distress in similar situations to their initial traumatic experience, throughout their lives.

Another form of psychological distress at exposure tooth external and internal cues was also evident in the way in which the three respondents spoke about their traumatic events. When describing details of the event they frequently spoke in an illogical manner, they did not complete their train of thought or sentences and they rapidly moved from one topic to another. The researcher hypothesises that this occurrence may be due to two different factors. Firstly, she hypothesises that this occurs due to the anxiety and related secretion of adrenaline and activation of fear-memory that the respondents undergo when they are re-experiencing the event. The researcher also hypothesises that this occurs because none of the respondents have gone for any type of therapeutic intervention following their traumatic experiences. As therapy helps an individual organise their thoughts around the event, fill in gaps left in their memory and desensitise them to the felt anxiety, these respondents may not be able to coherently relate the events of the violent crimes which were perpetrated against them.

This hypothesis was confirmed by research done by Ehlers, Hackmann, and Michael (2004) on memory fragmentation with regards to traumatic memories. They pointed out that trauma memories differ from other autobiographical memories, as they are initially experienced as pieces of the sensory components of the traumatic event, without semantic representation (Kolk & Fisler in Ehlers et al., 2004). McNally (in Ehlers, Hackmann, & Michael, 2004) explains the fragmentation of trauma memories by stating that the focal point of attention constricts during stress, and individuals appear to focus on essential features. This happens at the expense of recalling peripheral details. Ehlers et al. (2004) believed that as trauma is seen a time of severe stress, individuals can be expected to only encode the most important element, rather than the finer details. This was deduced from the results of their research on trauma memory fragmentation that indicated that trauma survivors remember the gist of what happened, but experience confusion regarding events, an inability to access certain information about the inability to provide a distinct timeline for the events. They elaborated by stating that expressions of confusion may indicate difficulties at encoding rather than difficulties with retrieving information from memory. Accordingly, Ehlers et al. (2004) have noted that one goal of the treatment of posttraumatic stress disorder is the development of an organised, structured narrative with a opening, middle and end. Additional studies have found that the degree of

fragmentation correlate with the severity of posttraumatic symptoms (Amir, Stafford, Freshman, & Foa in Ehlers et al., 2004).

The third symptom entails re-experiencing the violent crime by demonstrating physiological reactivity on exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event. This was evident through the physical responses that the respondents displayed and commented on during and directly following their accounts of the violent crimes that they have endured. One respondent described this reactivity as "… an uncomfortable feeling in the core" and "… a sense of readiness" where his "… muscles are on standby …" which clearly demonstrates symptoms of physiological arousal. Another described it as feeling startled, where the third describes experiencing an "adrenaline spike". Ehlers, Hackmann, and Michael (2004) are of the opinion that intrusive re-experiencing symptoms, such as distress in reaction to reminders of the traumatic event, appear to lack the attentiveness that the content of the memory are aspects from the past and, consequently, the sensory impressions are relived as if they were characteristics of something that was occurring at the moment. Ehlers and Clark (in Ehlers et al., 2004) elaborated that emotions, including bodily- and motor reactions associated with them, are similar to those that the individual experienced at the moment of the traumatic event.

The next three posttraumatic symptoms fall under Cluster C of the diagnostic criteria for PTSD as specified by the APA (2000), namely the persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness. Foa and Riggs (in Ullman, Townsend, Filipas and Starzynski, 2007) stated that overwhelming affect resulting from trauma exposure may lead victims to engage in efforts to avoid distressing appraisals and emotions about the trauma, especially shortly after the experience. Resick and Schnicke (in Ullman et al., 2007) believe that the avoidant responses may be adaptive in short-term while the individual navigates the crises period after the trauma occurs, but can be detrimental to the individual if it is maintained. This is due to the fact that that on-going avoidance coping may be associated with greater psychological trauma in the long-term because it hinders the course of processing the traumatic event by not allowing the individual to acknowledge and work through their thoughts and feelings related to it (Pineles et al.,

2011). Foa and Kozak (in Pineles et al., 2011) added that avoiding trauma memories or reminders hinder the natural recovery process that would allow for heightened arousal to decrease over time and it may also reinforce PTSD symptoms by signalling that the memories are dangerous. Foa and Rothbaum (in Pineles et al., 2011) concurred and noted that avoidance interferes with the successful processing of trauma memory, habituation of negative emotions associated with the traumatic memory, and the extinction of fear responses conditioned to internal or external trauma reminders.

There were different types of avoidance symptoms found within the data. The first is *avoidance of activities, places or people that arouse recollections of the trauma*. Two of the respondents moved into different residences following their experiences of armed robberies and two of the respondents changed employment shortly following the incident. In addition, one respondent avoided using his outside patio as he was ambushed there during his armed robbery.

The second type of avoidance symptoms that were present in the data was *a restricted range of affect* as displayed by one respondent. This was specifically related to the respondent's relaying of the incident. Flack, Litz, Hsieh, Kaloupek, and Keane (2000) theorised that emotional numbing, such as disinterest, detachment and restricted range of affect, is the result of emotional depletion caused by chronic hyperarousal. They elaborated that in individuals presenting with PTSD symptoms, high arousal states and problems linked to hyperarousal may affect problems related to emotional numbing in different ways. For example, Yehuda, Teicher, Levengood, Trestman, and Siever (in Flack et al., 2000) stated that individuals presenting with posttraumatic symptomology may be hypersensitive to even mild challenges or demands by neuro-endocrine dysregulation. The resultant stress reaction produces negative affect that are incompatible with positive feelings. Litz (in Flack et al., 2000) added that stress responses also restrict the individual's capacity to process emotions caused by the depletion of cognitive resources, for example limits in attention and concentration.

The third type of avoidance entails the effort to *avoid thoughts, feelings, or conversations associated with the trauma*. This was presented in three ways. Firstly,

one respondent avoided any thoughts associated with the incident and noted that "It's easier, I suppose, to stick it in file 13 and never think about it ever again". Secondly, two respondents avoided their feelings with regards to the injuries they have suffered during their experiences with violent crimes. They minimise their injuries or deny that they were injured. Ehlers, Hackman, and Michael (2004) are of the opinion that challenging appraisals of the trauma may correlate to various aspects of what individual's remembers about the trauma. The individual may demonstrate confusion about the time course of events, display a difficulty in assessing crucial details of the traumatic event, experience a difficulty in recall, which develop from encoding errors at the time of the traumatic event, or in a state of extreme arousal and/or confusion may struggle to differentiate between central and peripheral aspects of the event. The individual may also avoid reminiscing about the most anxiety-provoking details of the traumatic event. Finally, the researcher proposes that avoidance may have been illustrated within the process of finding research participants. The researcher speculated that the individuals' avoidance of thoughts, feelings and conversations were evident when individuals declared that they were unwilling to discuss their traumatic experiences, even years following the events. This was also displayed in the finding that none of the research participants had gone for therapy following their traumatic incident. This was also true for individuals who could not partake in the study as they met the criteria for posttraumatic stress disorder.

The final three posttraumatic symptoms are classified under Criteria D of the diagnostic criteria for PTSD as stated by the APA (2000), namely persistent symptoms of increased arousal. This study found that the respondents displayed three types of increased arousal symptoms, namely: irritability and anger; hypervigilance; and an increased or exaggerated startle response.

Two respondents noted that they experience irritability and anger, which was not present or so pronounced prior to their experiences of violent crime. This is not an uncommon finding as Castillo, Fallon, C'De Baca, Conforti, and Qualls (2002) stated that all individual who present with symptoms of PTSD are, by definition, vulnerable to *anger* problems. They found that anger in PTSD is characterised by both behavioural and cognitive expressions. Behavioural expressions of anger include

irritability and negativism, assault and verbal hostility, and are mostly expressed by men. Cognitive expressions of anger include resentment and suspicion which are mostly experienced by women. As an explanation for the occurrence of irritability and anger, Chemtob, Novaco, Hamada, Gross, and Smith (in Castillo et al., 2002) noted that anger regulatory deficits, in individuals who present with PTSD symptomology, may be the result of perceiving and processing information about benign events as if they were life threatening. Anger may be seen as a natural occurrence that is present when an individual experiences trauma, however anger-related ruminative thoughts about the trauma may trigger the re-experiencing of symptoms and fuel hyperarousal and exacerbate already present, posttraumatic symptoms (Chemtob, Novaco, Hamada, & Gross in Stapleton et al., 2006). In addition to this, the severity of anger is related to the severity of PTSD symptoms (Henning & Frueh in Stapleton et al., 2006) and high levels of anger have even been linked to poorer outcomes in treatments (Foa, Riggs, Massie, & Yarczower in Stapleton et al., 2006). This may explain why the respondents still experience anger and other posttraumatic symptoms years after the traumatic events.

All three of the research participants displayed signs of hypervigilance. The researcher found it noteworthy that the attentiveness and cautious behaviour that the participants displayed became a second nature and part of their daily routine. As was evident from the data collected, *hypervigilance* suggests a "readiness and preparation to deal with potentially negative events" (Barlow in DeViva, Zayfert ,& Mellman, 2004, p.163) and increases the likelihood of detecting and reacting to environmental stimuli that has been interpreted as threatening. Kimble, Fleming, and Bannion (2013) are of the opinion that hypervigilance has cognitive, physiological and behavioural components. Ehlers and Clark (in Kimble et al., 2012) described its cognitive components as tendencies towards suspicion, mistrust and negative expectations of the future. Behaviourally, hypervigilance may include safety-seeking such as planning escape routes and avoiding situations where one could be trapped. It is also associated with physiological arousal (Conoscenti, Vine, Papa, & Litz in Kimble et al., 2013). Steenkamp et al. (2012) are of the opinion that hypervigilance that persevere in safe situations, specifically many years subsequent to the traumatic event, may be a

significant indicator of a severe posttraumatic stress response as well as an inability to curb anxious responses.

Two of the respondents commented that they have an *exaggerated startle response* following their experiences of violent crime. Southwick, Morgan, Darnell, Bremner, Nicolaou, and Nagy (in Pole, Neylan, Best, Orr, & Marmar, 2003) noted that individuals who have PTSD frequently complain about overreacting to sudden, loud noises and Pole et al. (2003) believe that the exaggerated startle response distinguishes PTSD from any other psychiatric disorder. According to Griffin (2008) individuals with chronic posttraumatic symptoms show heightened acoustic startle reactivity. Morgan and Grillon (in Griffin, 2008) suggested two hypotheses regarding the relationship between startle reactivity and PTSD. Firstly, the heightened startle reactivity may be a pre-existing condition in individuals who develop PTSD and may consequently be seen as an indicator for the development of the disorder. This finding was concurred by Guthrie and Bryant (in Griffin, 2008), who stated that a pre-existing elevated startle response is an indicator of vulnerability to posttraumatic responses. Secondly, a heightened startle response may develop in individuals who suffer from PTSD or display posttraumatic symptoms due to the development of neuronal sensitisation that develops along with the symptoms of the disorder.

The **fourth** important finding was the additional effects experienced by the respondents following a violent crime. These effects are important enough to influence an individual's life on a daily basis, but are not considered as symptoms of PTSD, as defined by the APA (2000). The first effect that was found in the study was *physical illness*. The link between the experience of trauma and physical illness is well established, as is evident from the findings of Norman, Means-Christensen, Craske, Sherbourne, Roy-Byrne, and Stein (2006), which held that posttraumatic stress disorder effects changes in a variety of physiological and behavioural pathways, all of which increases an individual's susceptibility to illness. Two examples of physical illness were exposed within this study. The first complaint was that of an increase in headaches and influenza in one respondent. This is, by no means, an isolated incident as posttraumatic symptoms or the diagnosis of PTSD has been associated with migraines (Peterlin, Nijjar, & Tietjen, 2011; Peterlin, Tietjen, Meng,

Lidicker, & Bigal, 2008). The second effect found in this study pertains to an overactive thyroid that was found in one respondent. It is important to note that the respondent does have a family history of hyperthyroidism, but that her condition was activated shortly following her experience of an aggravated robbery. It was subsequently explained to her that she had a genetic vulnerability to developing the illness and that social factors triggered the over activation of her thyroid. Her condition was so severe that she had to undergo chemotherapy and will have to take medication for the rest of her life. In current literature there is a definite link between thyroid function and posttraumatic symptoms. Groenjian et al. (2003) noted that both thyroid stimulating hormone (TSH) and growth hormone (GH) are both secreted by the anterior pituitary gland and are associated with the hormonal response to stress. Building on this, Friedman, Charney, and Deutch (in Vermetten & Bremner, 2002) found that the pathophysiology of posttraumatic symptoms reflects long lasting changes within the biological stress response systems that underlie many of the symptoms of PTSD and other trauma-related disorders. This led Vermetten and Bremner (2002) to infer that the thyroid system is altered in chronic posttraumatic symptomology.

The second effect found within the data was that of self-blame. It is important to explore self-blame following a traumatic event as they are strongly related to victim recovery outcomes, particularly the presentation of PTSD symptoms (Ullman et al., 2007). Within this study, two respondents still express self-blame with regards to their experience of a violent crime. This may be due to the fact that individuals with current PTSD symptomology perceived the world and themselves as more negative and reported more trauma-related self-blame than individuals who have undergone a traumatic incident, but did not present with posttraumatic symptoms (Foa, Ehlers, Clark, Tolin, & Orsillo in Foa & Rauch, 2004). Ullman, Townsend, Filipas, and Starzynski (2007) noted that to make sense of an assault, survivors must make attributions for why the assault occurred. They noted two types of self-blame attributions, namely behavioural self-blame and characterological self-blame. Janoff-Bulman (in Ullman et al., 2007) stated that behavioural self-blame reflects an individual's belief that their own behaviour led to the crime that was committed against them. By blaming themselves for the crime the individual is identifying a cause and thereby gains a sense of control over why the crime had occurred, as was

evident in the interview with Respondent no.1. Characterological self-blame rather focuses on the individual's personality or character as the cause for the crime that was committed against them, as was evident from the extracts of Respondent no.3. Due to the effect that self-blame has on an individual's functioning and the maintenance of posttraumatic symptoms it was included in the DSM-5 (2013).

The **fifth** and final, important finding was the effect that more than one crime can have on an individual. As was evident from this study, how the individual reacts towards a second crime depends on the type of crime they had experienced (on both occasions) as well as the time that had elapsed between the various victimisations. Two separate experiences were discovered within this study.

Firstly, the second experience of a crime was evaluated as less severe than the first and, consequently, easier to process. This occurred for two of the participants. It may be hypothesised that the respondents experienced their second victimisations as less severe for various reasons. Firstly, both individual's first experience of a crime was with a violent crime which, for one respondent, lasted a few hours. The respondent's experience of a crime, which was incorporated into their core cognitive schemas was therefore of a horrible, unpredictable event during which the lives of themselves and their loved ones were at risk. Their subsequent experience of crimes (a housebreaking and aggravated robbery, independently), were not as dangerous or unexpected when compared to their first experiences and were, consequently, viewed as less severe. A second hypothesis involves the time that had elapsed between the two incidents, which was more than a year for both respondents. It may be hypothesised that this long period between incidents allowed for the full accommodation of the first traumatic event into the individuals cognitive schemas. When the second event occurred, they had already assimilated their first experience as much as possible and, therefore, saw the second traumatic event as separate from the first and in relation to the first and deemed it as less severe. A third hypothesis is applicable to Respondent no.2 who experienced an armed robbery at the age of seven and an aggravated robbery at the age of twenty-nine. It may be hypothesised that due to the anger and anxiety she experiences, stemming from the fact that an emotionally valued, irreplaceable item was taken and she was hurt during the second crime, the respondent may feel emotionally overwhelmed by the experience. This may lead to her

employment of the defence mechanism of avoidance to help her continue her daily activities, without being constantly reminded of the event. She is, consequently, not aware of the effect that this event had on her and views it as trivial.

The second, and more explored, effect of more than one victimisation is the cumulative effects of crime. This was evident in one respondent, who experienced a theft of a mobile telephone exactly one week after an experience of an armed robbery. The individual stated that the crimes were both horrible, on an equal level, indicating that the crimes may be viewed a single event. This finding may be ascribed to the short time period between the two crimes. The researcher hypothesises that because the initial crime of armed robbery was still recent and constantly in active memory, and the individual still experienced a vast number of symptoms relating to acute stress disorder, her heightened state of arousal disallowed her to separate the two events and they became a single event during her assimilation of a traumatic event into her cognitive schemas. The researcher also believes that it is important to take the individual's history and pre-existing cognitive schemas into account when exploring how she was affected by a subsequent crime. The respondent had pre-existing, rigid schemas that had a negative view of both the world and herself prior to her experience of the initial crime of armed robbery. These schemas were confirmed by this event and her negative schemas were inflated which, in turn, led to an exaggerated response to the subsequent crimes.

Various authors have also commented on the cumulative effects of crimes. Suliman et al. (2009) found that multiple traumatic events are associated with greater psychiatric morbidity, including PTSD symptomology. Linares (2004) believed that prior victimisation served as a risk factor for future victimisation. From a theoretical perspective of cumulative risk she agreed with Haggarty (in Linares, 2004) who commented that there is a linear relationship between exposure to more types of victimisation and symptom severity, since exposure to more types of victimisations leads to an increase in levels of distress and an impairment in functioning. Resnick, Kilpatric, Dansky, Saunders, and Best (in Suliman et al., 2009) have pointed out that individuals identified as having PTSD after a particular trauma may in fact have a pre-existing PTSD from an earlier exposure to crime. Alternatively, the earlier experience of a traumatic event may have exacerbated the response to the more recent traumatic event. Suliman et al. (2009) believe that in such cases the individual may be

responding to the cumulative effect of trauma exposure, rather than to the given event. Their belief was substantiated by their finding that posttraumatic symptoms increase linearly with each successive traumatic exposure.

## 7.3 Testing the problem statement made in the research

The aim of this research study was threefold. Firstly it set out to explore the occurrence of residual, subclinical symptoms that individuals may experience subsequent to surviving a violent crime. Secondly, it attempted to describe similarities that exist between the research participants' accounts of such residual, subclinical symptoms. Thirdly, it wanted to explore and describe the phenomenon of partial posttraumatic stress disorder in order to expand the understanding of this phenomenon.

After analysing the data gathered within the study, the researcher discovered that a select number of participants, who have experienced a violent crime and do not meet the criteria for posttraumatic stress disorder, may still experience posttraumatic symptoms. These symptoms may persist for years following their experience with a violent crime and influence their lives on a regular basis. These symptoms, therefore, classify as residual, subclinical symptoms of posttraumatic stress disorder. The researcher therefore confirmed that individuals may experience residual, subclinical symptoms subsequent to surviving a violent crime.

Interestingly, the researcher also discovered that there are numerous individuals who display posttraumatic symptoms that are not subclinical, but are severe enough to confirm the diagnosis of PTSD. This was true for individuals, even if the traumatic crime they experienced occurred years prior to this study, with seven years being the longest period. These two findings stipulate that individuals do experience residual, subclinical symptoms following exposure to a violent crime, but that there are also many individuals who still meet the criteria for PTSD years after their traumatic incidents. These results indicate that the effects of violent crime are more severe than originally estimated.

This research also found that individuals experienced similar posttraumatic symptoms. Two out of three respondents experienced each of the following symptoms: extreme psychological distress at exposure to external or internal cues that resemble an aspect of the traumatic event; physiological reactivity on exposure to internal or external cues that symbolise or resemble an aspect of the trauma; evasion of people, activities or places that bring about memories of the trauma; irritability and anger; hypervigilance and an increased startle response. Not all of the symptoms associated with PTSD were accounted for by the study and a few symptoms were only experienced by one individual. They include: recurrent and distressing dreams of the event; a restricted range of affect and the effort to avoid thoughts, feelings, or conversations associated with the trauma. This indicates that, although individuals may experience similar posttraumatic symptoms, each individual's presentation of residual subclinical symptoms are unique and are influenced, but not limited to, by their previous and assimilated core cognitive schemas, the type of crime that was committed and whether they have a history of previous victimisation.

In exploring and describing the occurrence of residual, subclinical symptoms of posttraumatic stress disorder and the fact that all three individuals displayed various residual, subclinical posttraumatic symptoms, and the finding that these symptoms affect their lives on a regular basis, the researcher feels that this expands the understanding of the phenomenon of partial posttraumatic stress disorder.

## 7.4 Conclusions drawn from the study

This study set out to explore the phenomenon of residual, subclinical symptoms of PTSD that may follow the exposure to the specific violent crimes of an armed robbery, motor vehicle hijacking as well as assault with a deadly weapon. This study made use of the case study method and five individuals were approached through convenience or purposive sampling. Three research participants were selected after they did not meet the criteria for posttraumatic stress disorder, as assessed by the PCL-S. Each participant partook in a one-on-one semi-structured interview and thematic analysis was utilised to explore the data.

This study made five important findings. First, it showed that a select number of individuals who have experienced violent crimes do not only present with subclinical posttraumatic symptoms, but many still meet the requirements for a diagnosis of PTSD, even years following their experiences with traumatic events. Second, it found that following the experience of violent crime an individual's core cognitive schemas regarding themselves, their world and their relationships may undergo changes. Third, it established that individuals can experience numerous posttraumatic symptoms, which are not extensive enough to validate the diagnosis of PTSD, but that affect the individual's life on a regular basis. Fourth, it recognised that individuals may experience additional effects, i.e. physical illness and self-blame, that are not classified as posttraumatic symptoms, but that affect an individual's life on a regular basis and may lead to poorer outcomes in the presentation and maintenance of posttraumatic symptoms. Fifth, it discovered that individuals who have experienced more than one crime may experience cumulative or diminished effects when looking at the overall effects of revictimisation.

It is important to note that most of the symptoms that individuals experience subsequent to a violent crime are interlinked. For example, a change in the individual's cognitive schemas, in order to accommodate the experience of crime, may lead to the suspicion of others. This, in turn, may lead to anxiety, anger, irritability and hypervigilance, which may lead to re-experiencing symptoms and hyperarousal, which leads to symptoms of persistent avoidance, such as a restricted range of affect. Experiencing symptoms of persistent avoidance may maintain posttraumatic symptomology leading to the continual experience of posttraumatic symptoms.

These findings led to the confirmation and simultaneous rejection of the notion that individuals may present with residual, subclinical symptoms following their experience with a violent crime. This occurred because these symptoms were displayed in some individuals, but others still presented with diagnosable PTSD, even

years following the traumatic event. The study did confirm that individuals experience similar residual, subclinical symptoms, but this was not true for all symptoms, indicating that individuals' presentation of PTSD symptoms are as unique as they are and were influenced by their history, cognitive schemas and the characteristics of the crimes they experienced. Finally, these findings indicated that the diagnosis of partial posttraumatic stress disorder is valid, but due to the fact that the research sample was so small, more research may be needed before it may be stated that the diagnosis may be present within the larger community.

## 7.5 Limitations of the study

This study had various limitations. Firstly, it only had three participants and the results can, therefore, not be generalised to the general population. Secondly, the study focused on the specific crime of armed robbery, as participants who experienced a motor vehicle hijacking or an assault with a deadly weapon, without meeting the criteria for a diagnosis for PTSD, could not be found.

The study did not explore any diagnoses or symptoms that were not associated with PTSD, and subsequently did not take into account the effect of comorbid conditions on the presentation and maintenance of posttraumatic symptoms. Lastly, this study did not include information of the participants' history. As information regarding their relationship with their caregivers and their environment may contribute towards an individual's cognitive schemas prior to the traumatic event, this information may have assisted in fully understanding the specific changes that the individual's cognitive schemas underwent following their traumatic experience.

## 7.6 Recommendations

Due to the fact that the researcher discovered that there are several individuals who display posttraumatic symptoms that corroborate the diagnosis of PTSD it is suggested that this is an important topic for future research. Due to South Africa's high crime rate and the great amount of violent crimes committed on a daily basis, one can only anticipate that there are numerous individuals in South Africa who meet

the criteria for a diagnosis of PTSD and who never seek help for their symptoms. It would be interesting to see what percentage of the population still meet the criteria for PTSD years after their exposure to a violent crime and what symptoms they display.

According to Amstadter, McCart, and Ruggiero (2007) comorbidity is prevalent among crime victims with a diagnosis of PTSD. Comorbid conditions may include Major Depressive Disorder as well as Anxiety Disorders. Pietrzak, Goldstein, Southwick, and Grant (2011) supports this statement and added that the diagnoses of both PTSD and partial PTSD were associated with elevated rates of mood disorders, substance abuse disorders and suicide attempts. Due to the fact that this research study solely focused on the presentation of posttraumatic stress symptoms it is suggested that a future study take comorbid diagnoses into consideration while exploring the phenomenon of partial posttraumatic stress disorder. It would be interesting to see how these comorbid diagnoses influence and maintain the presentation of posttraumatic stress symptoms as well as which symptoms associated with PTSD can, concurrently, occur in a comorbid diagnosis.

None of the research participants had undergone any type of therapeutic intervention following their experience of a violent crime and their subsequent experience of posttraumatic symptoms. Future research can explore the effect that therapy has on long-term posttraumatic symptom presentation.

Future research can also compare the prevalence of PTSD and the presentation of posttraumatic symptoms in individuals who have experienced a violent crime as compared to individuals who have experienced other types of traumatic events, for example a natural disaster.

## 7.7 Conclusion

In this chapter the researcher discussed the five important findings that were made by this study, i.e. that many individuals who have experienced violent crimes still meet the criteria for PTSD; that following the experience of a violent crime individuals'

core cognitive schemas regarding themselves, their world and their relationships undergo changes; that individuals experience numerous subclinical posttraumatic symptoms following a violent crime; that individuals may experience additional effects which are not classified as posttraumatic symptoms; and that individuals who have experienced more than one crime may experience cumulative or diminished effects of crime. The problem statement was explored in relation to these findings and conclusions regarding the study were drawn. The researcher then commented on the limitations of the study and made recommendations for future research.

# REFERENCE LIST:

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., Rev. ed.). Washington, DC: American Psychiatric Association.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: American Psychiatric Association.

Amstadter, A.B.; McCart, M.R. & Ruggiero, K.J. (2007). Psychosicial interventions for adults with crime-related PTSD. *Professional Psychology*, 38(6), 640-651. doi:10.1037/0735-7028.38.6.640

Andrews, B.; Brewin, C.; Rose, C.R. & Kirk, M. (2000). Predicting PTSD symptoms in victims of violent crime: The role of shame, anger, and childhood abuse. *Journal of Abnormal Psychology*, 109(1), 69-73. doi:10.1037/0021-843X.109.1.69

Andrews, L.; Joseph, S.; Troop, N.; Van Rooyen, T.; Dunn, B.D. & Dalgleish, T. (2012). The structure of avoidance following trauma: Development and validation of the Post-traumatic Avoidance Scale (PAS). *Traumatology*, 19(2), 126-135. doi:10.1177/1534765612455225

Banyard, V.L.; Williams, L.M. & Siegel, J.A. (2001). The long-term mental health consequences of child sexual abuse: An exploratory study of the impact of multiple traumas in a sample of women. *Journal of Traumatic Stress*, 14(4), 697-715. doi:10.1023/A:1013085904337

Baranyi, A.; Leithgöb, O.; Kreiner, B.; Tanzer, K.; Ehrlich, G.; Hofer, H.P. & Rothenhäusler, H. Relationship between post-traumatic stress disorder, quality of life, social support, and affective and dissociative status in severely injured accident victims 12 months after trauma. *Psychosomatics*, 51(3), p.237-247. doi:10.1176/appi.psy.51.3.237

Bartol, C.R. (2002). *Criminal behavior: A psychosocial approach* (6th ed.). Upper Saddle River, NJ: Hamilton Printing.

Beck, J.G.; Grant, D.M.; Read, J.P.; Clapp, J.D.; Coffey, S.F.; Miller, L.M. & Palyo, S.A. (2008). The Impact of Event Scale-Revised: Psychometric properties in a sample of motor vehicle accident survivors. *Journal of Anxiety Disorders*, 22(2), 187-198. doi: 10.1016/j.janxdis.2007.02.007

Belleville, G.; Marchand, A.; St-Hilaire, M.; Martin, M. & Silva, C. (2012). PTSD and depression following armed robbery: Patterns of appearance and impact on absenteeism and use of health care services. *Journal of Traumatic Stress*, 25(4), 465-468. doi:10.1002/jts.21726

Bennett, P.; Owen, R.L.; Koutsakis, R. & Bisson, J. (2002). Personality, social context and cognitive predictors of post-traumatic stress disorder in myocardial infarction patients. *Psychology and Health*, 17(4), 489-500. doi:10.1080/0887044022000004966

Berger, W., Figueira, I., Maurat, A.M., Bucassio , E.P., Vieira, I., Jardim, S.R., Coutinho, E.S.F., Mari, J.J. & Mendlowicz, M.V. (2007). Partial and full PTSD in Brazilian ambulance workers: Prevalence and impact on health and on quality of life. *Journal of Traumatic Stress*, 20(4), 637-642. doi:10.1002/jts.20242

Birmes, P.; Brunet, A.; Carreras, D.; Ducassé, J.;Charlet, J.; Lauque, D.; Sztulman, H. & Schmitt. L. (2003). The predictive power of peritraumatic dissociation and acute stress symptoms for post-traumatic stress symptoms: A three-month prospective study. *The American Journal of Psychiatry*, 160(7), 1337-1339. doi:10.1176/appi.ajp.160.7.1337

Blanchard, E.B.; Jones-Alexander, J.; Buckley, T.C. & Forneris, C.A. (1996). Psychometric properties of the PTSD checklist (PCL). *Behaviour Research and Therapy*, 34(8), 669-673. Retrieved from www.ncbi.nlm.nih.gov/pubmed/8870294

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa

Breslau, N.; Lucia, V.C. & Davis, G.C. (2004). Partial PTSD versus full PTSD: An empirical examination of associated impairment. *Psychological Medicine*, 34(7), 1205-1214. Retrieved from http://dx.doi.org/10.1017/S0033291704002594

Brewin, C.R. (2001). Memory processes in post-traumatic stress disorder. *International Review of Psychiatry*, 13(3), 159-163. doi:10.1080/09540260120074019

Brewin, C.R. & Holmes, E.A. (2003). Psychological theories of post-traumatic stress disorder. *Clinical Psychology Review*, 23(3), 339-376. Retrieved from http://dx.doi.org/10.1016/S0272-7358(03)00033-3

Brewin, C.R., Dalgleish, T. & Joseph, S. (1996). A dual representation theory of post-traumatic stress disorder. *Psychological Review*, 103(4), 670-686. doi:10.1037/0033-295X.103.4.670

Brewin, C.R.; Andrews, B. & Rose, S. (2003). Diagnostic overlap between acute stress disorder and PTSD in victims of violent vrime. *The American Journal of Psychiatry*, 160(4), 783-785. doi:10.1176/appi.ajp.160.4.783

Brewin, C.R.; Andrews, B. & Rose, S. (2000). Fear, Helplessness, and horror in post-traumatic stress disorder: Investigating DSM-IV Criterion A2 in victims of violent crime. *Journal of Traumatic Stress*, 13(3), 499-509. doi:10.1023/A:1007741526169

Brewin, C.R.; Andrews, B. & Valentine J.D. (2000). Meta-analysis of risk factors for post-traumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology*, 68(5), 748-766. doi:10.1037/0022-006X.68.5.748

Brown, J.R.; Hill, H.M. & Lambert, S.F. (2005). Traumatic stress symptoms in women exposed to community and partner violence. *Journal of Interpersonal Violence*, 20(11), 1478-1494. doi:10.1177/0886260505278604

Bryant, R,A.; Moulds, M.L. & Nixon, R.V.D. (2003). Cognitive behaviour therapy of acute stress disorder: A four-year follow-up. *Behaviour Research and Therapy*, 41(4), 489-494. Retrieved from http://dx.doi.org/10.1016/S0005-7967(02)00179-1

Bryant, R.A., Sackville, T., Dang, S.T., Moulds, M., & Guthrie, R. (1999). Treating acute stress disorder: An evaluation of cognitive behavior therapy and supportive counselling techniques. *The American Journal of Psychiatry*, 156(11), 1780-1786. Retrieved from http://ajp.psychiatryonline.org/article.aspx?articleid=173794

Bryman, A. (2007). *Qualitative research 2 (Vol. 2: Quality issues in qualitative research)*. London, England: Sage.

Bryman, A. (2007). *Qualitative research 2 (Vol. 3: Issues of representation and reflexivity)*. London, England: Sage.

Cahill, L. & McGaugh, J.L. (1998). Mechanisms of emotional arousal and lasting declarative memory. *Trends in Neurosciences*, 21(7), p.294-299. doi:10.1016/S0166-2236(97)01214-9

Cahill, S. P., Rothbaum, B. O., Resick, P. A., & Follette, V. M. (2009). Cognitive-behavioral therapy for adults. In E. B. Foa, T. M. Keane, M. J. Friedman, & J. A. Cohen (Eds.), *The effective treatment for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies* (pp. 139–222). New York, NY: Guilford.

Campbell, J.C. (2002). Health consequences of intimate partner violence. *The Lancet*, 359(9314), 1331-1336. Retrieved from www.e-ope.ee/_download/euni.../file/.../Campbell_IPV_and_health.pdf

Campbell, R. & Wasco, S.M. (2005). Understanding rape and sexual assault: 20 Years of progress and future directions. *Journal of Interpersonal Violence*, 20(1), 127-131. doi:10.1177/0886260504268604

Carty, J.; O'Donnell, M.L. & Creamer, M. (2006). Delayed-onset PTSD: A prospective study of injury survivors. *Journal of Affective Disorders*, 90(2-3), 257-261. doi:http://dx.doi.org/10.1016/j.jad.2005.11.011

Castillo, D.T.; Fallon, S.K.; C'De Baca, J.; Conforti, K. & Qualls, C. (2002). Anger in PTSD: General psychiatric and gender differences on the BDHI. *Journal of Loss and Trauma*, 7(2), 119-128. Retrieved from http://dx.doi.org/10.1080/153250202753472282

The Centre for the Study of Violence and Reconciliation (CSVR). (2007, June 25). *The Violent Nature of Crime in South Africa: A concept paper for the Justice, Crime Prevention and Security Cluster* (Department: Safety and Security Publication). Retrieved from http://www.gov.za/issues/crime/violent_crime.pdf

Classen, C.; Koopman, C.; Hales, R. & Spiegel, D. (1998). Acute stress disorder as a predictor of post-traumatic stress symptoms. *The American Journal of Psychiatry*, 155(5), 620-624. Retrieved from www.ncbi.nlm.nih.gov/pubmed/9585712

Cockram, D.M.; Drummond, P.D. & Lee, C.W. (2010). Role and treatment of early maladaptive schemas in Vietnam veterans with PTSD. *Clinical Psychology and Psychotherapy*, 17(3), 165-182. doi:10.1002/cpp.690

Coker, A.L.; Davis, K.E.; Arias, I.; Desai, S.; Sanderson, M.; Brandt, H.M. & Smith, P.H. (2002). Physical and mental health effects of intimate partner violence for men and women. *American Journal of Preventive Medicine*, 23(4), 260-268. Retrieved from http://people.cas.sc.edu/daviske/nvawajpm.pdf

Cook, J.M.; Harb, G.C.; Gehrman, P.R; Cary, M.S.; Gamble, G.M.; Forbes, D. & Ross, R.J. (2010). Imagery rehearsal for post-traumatic nightmares: A randomized controlled trial. *Journal of Traumatic Stress*, 23(5), 553-563. doi:10.1002/jts.20569

Corcoran, P.B.; Walker, K.E. & Wals, A.E.J. (2004). Case studies, make-your-case studies, and case stories: a critique of case study methodology in sustainability in higher education. *Environmental Education Research*, 10(1), 7-21. doi: 10.1080/1350462032000173670

Corsini, R.J. (2002). *The dictionary of psychology*. New York, NY: Brunner-Routledge.

Cougle, J.R.; Smits, J.A.J.; Lee, H.; Powers, M.B. & Telch, M.J. (2005). Singular and combined effects of thought suppression and anxiety induction of frequency of threatening thoughts: An experimental investigation. *Cognitive Therapy and Research*, 29(5), 525-539. doi:10.1007/s10608-005-2793-x

Creamer, M.; Burgess, P. & Pattison, P. (1992). Reaction to trauma: A cognitive processing model. *Journal of Abnormal Psychology*, *101*(3), 452-459. doi:10.1037/0021-843X.101.3.452

Cukor, J.; Wyka, K.; Jayasinghe, N. & Difede, J. (2010). The nature and course of subthreshold PTSD. *Journal of Anxiety Disorders*, 24(8), 918-923. doi:10.1016/j.janxdis.2010.06.017

Davis, J.L.; Byrd,P.; Rhudy, J.L. & Wright, D.C. (2007). Characteristics of chronic nightmares in a trauma-exposed treatment-seeking sample. *Dreaming*, 17(4), 187-198. doi:10.1037/1053-0797.17.4.187

Davis, L., Klopper, H.F., Nomoyi, N.C., & Theron, A. (2002). *Violent crime: Student reader crimonology 1*. Pretoria, South Africa: University of Pretoria.

de Vos, A.S., Strydom, H., Fouche, C.B. & Delport, C.S.L. (2002). *Research at grass roots: For the social sciences and human service professions* (2nd ed.). Pretoria, South Africa: Van Schaik.

Dekel, S.; Peleg, T., & Solomon, Z. (2013). The Relationship of PTSD to negative cognitions: A 17-year longitudinal study. *Psychiatry: Interpersonal & Biological Processes*, 76(3), 241-255. doi:10.1521/psyc.2013.76.3.241

Devilly, G.J. (2002). Clinical intervention, supportive counselling and therapeutic methods: A clarification and direction for restorative treatment. *International Review of Victimology*, 9(1), 1-14. doi:10.1177/026975800200900101

DeViva, J.C.; Zayfert, C. & Mellman, T.A. (2004). Factors associated with insomnia among civilians seeking treatment for PTSD: An exploratory study. *Behavioral Sleep Medicine*, 2(3), 162-176. doi: 10.1207/s15402010bsm0203_5

Deykin, E.Y.; Keane, .M.; Kaloupek, D.; Fincke, G.; Rothendler, J.; Siegfried, M., & Creamer, K. (2001). Post-traumatic stress disorder and the use of health services. *Psychosomatic Medicine*, 63(5), 835-841. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/11573033

Dunmore, E., Clark, D. M., & Ehlers, A. (1999). A prospective investigation of the role of cognitive factors in persistent posttraumatic stress disorder (PTSD) after physical or sexual assault. *Behaviour Research and Therapy, 39,* 1063–1084. doi:10.1016/S0005-7967(00)00088-7

Edwards, D. (2005). Post-traumatic stress disorder as a public health concern in South Africa. *Journal of Psychology in Africa (Elliot & Fitzpatrick, Inc.)*, 15(2), 125-134. Retrieved from http://dx.doi.org/10.4314/jpa.v15i2.30650

Edwards, D. (2005). Treating PTSD in South African contexts: A theoretical framework and a model for developing evidence-based practice. *Journal of Psychology in Africa*, 15(2), 209-220. Retrieved from http://eprints.ru.ac.za/1475/1/Treating_PTSD.pdf

Ehlers, A. & Clark, D.M. (2000). A cognitive model of post-traumatic stress disorder. *Behaviour Research and Therapy*, 38(4), 319-345. Retrieved from http://www.academyofct.org/wp-content/uploads/2013/10/Ehlers_Clark_2000.pdf

Ehlers, A.; Hackman, A. & Michael, T. (2004). Intrusive re-experiencing in post-traumatic stress disorder: Phenomenology, theory, and therapy. *Memory*, 12(4), 403-415. doi:10.1080/09658210444000025

Ehring, T.; Ehlers, A.; Cleare, A.J., & Glucksman, E. (2011). Do acute psychological and psychobiological responses to trauma predict subsequent symptom severities of PTSD and depression? *Psychiatry Research*, 161(1), 67-75. doi:10.1016/j.psychres.2007.08.014

Eid, J.; Larsson, G.; Johnsen, B.H.; Laberg, J.C.; Bartone, P.T., & Carlstedt, B. (2009). Psychometric properties of the Norwegian Impact of Event Scale-Revised in a non-clinical sample. *Nordic Journal of Psychiatry*, 63(5), 426-432. doi:10.1080/08039480903118190

Elklit, A. & Brink, O. (2003). Acute stress disorder in physical assault victims visiting a Danish emergency ward. *Violence and Victims*, 18(4), 461-472. Retrieved from http://dx.doi.org/10.1891/vivi.2003.18.4.461

Elklit, A. & Brink, O. (2004). Acute stress disorder as a predictor of post-traumatic stress disorder in physical assault victims. *Journal of Interpersonal Violence*, 19(6), 709-726. doi:10.1177/0886260504263872

Eriksson, C.B.; Vande Kemp, H.; Gorsuch, R.; Hoke, S., & Foy, D.W. (2001). Trauma exposure and PTSD symptoms in international relief and development personnel. *Journal of Traumatic Stress*, 14(1), 205-212. doi: 10.1023/A:1007804119319

Fagan, A.A. & Mazerolle, P. (2011). Repeat offending and repeat victimization: Assessing similarities and differences in psychosocial risk factors. *Crime & Delinquency*, 57(5), 732-755. doi:10.1177/0011128708321322

Faravelli, C.; Guigni, A.; Salvatori, S., & Ricca, V. (2004). Psychopathology after rape. *The American Journal of Psychiatry*, 161(8), 1483-1485. doi:10.1176/appi.ajp.161.8.1483

Farrall, S. & Gadd, D. (2004). The Frequency of the Fear of Crime. *British Journal of Criminology*, 44(1), 127-132. doi:10.1093/bjc/44.1.127

Faull, A. & Mphuthing, P. (2009). Victim Support. In C. Gould (Ed.), *Criminal (in)justice in South Africa* (pp. 124-147). Cape Town, South Africa: ISS.

Feather, N.T. (1963). Mowrer's revised two-factor theory and the motive-expectancy-value model. *Psychological Review*, 70(6), 500-515. doi:10.1037/h0043736

Fereday, J. & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*. 5(1), 1-13. Retrieved from http://ejournals.library.ualberta.ca/index.php/IJQM/article/download/4411/3530

Flack, W.F.; Litz, B.T.; Hsieh, F.Y.; Kaloupek, D.G. & Keane, T.M. (2000). Predictors of emotional numbing, revisited: A replication and extension. *Journal of Traumatic Stress*, 13(4), 611-618. doi:10.1023/A:1007806132319

Flick, U. (2008). *Designing Qualitative Research*. London, England: Sage.

Foa, E. B., & Jaycox, L. H. (1999). Cognitive-behavioral theory and treatment of posttraumatic stress disorder. In D. Spiegel (Ed.), Efficacy and cost-effectiveness of psychotherapy (pp. 23–61). Washington, DC: American Psychiatric Press.

Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin*, 99(1), 20–35. doi:10.1037/0033-2909.99.1.20

Foa, E.B. & Rauch, S.A.M. (2004). Cognitive changes during prolonged exposure versus prolonged exposure plus cognitive restructuring in female assault survivors with post-traumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 72(5), 879-884. doi:10.1037/0022-006X.72.5.879

Foa, E. B., & Rothbaum, B. O. (1998). *Treating the trauma of rape: A cognitive behavioral therapy for PTSD.* New York, NY: Guilford.

Foa, E.B.; Huppert, J.D. & Cahill, S.P. (2006). Emotional processing theory: An update. In B.O. Rothbaum (Ed.), *Pathological anxiety: Emotional processing in etiology and treatment* (pp.3-24). New York, NY: Guilford.

Foa, E.B.; Riggs, D.S.; Massie, E.D. & Yarczower, M. (1995). The impact of fear activation and anger on the efficacy of exposure treatment for post-traumatic stress disorder. *Behaviour Therapy*, 26(3), 487-499. Retrieved from http://dx.doi.org/10.1016/S0005-7894(05)80096-6

Foa, E.B.; Steketee, G. & Rothbaum, B.O. (1989). Behavioural/cognitive conceptualizations of post-traumatic stress disorder. *Behaviour Therapy*, 20(2), 155-176. doi:10.1016/S0005-7894(89)80067-X

Follette, V.M.; Polusny, M.A.; Bechtle, A.E. & Naugle, A.E. (1996). Cumulative trauma: The impact of child sexual abuse, adult sexual assault, and spousal abuse. *Journal of Traumatic Stress*, 9(1), 25-35. doi:10.1007/BF02116831

Furlow, B. (2010). Domestic violence. *Radiologic Technology*, 82(2), 133-153. Retrieved from http://www.radiologictechnology.org/content/82/2/133.abstract

Giorgi, A. & Giorgi, B. (2008). Phenomenology. In J.A. Smith (Ed.), *Qualitative Psychology: A practical guide to research methods* (2nd ed.) (pp.27-52). California, CA: Sage.

Golding, J.M. (1999). Intimate partner violence as a risk factor for mental disorders: A meta-analysis. *Journal of Family Violence*, 14(2), 99-132. doi:10.1023/A:1022079418229

González-Prendes, A.A and Resko, S.M. (2012). Cognitive-Behavioural Theory. In S. Ringel and J. Brandell (Eds.), *Trauma: contemporary directions in theory, practice, and research* (pp.14-40). California, CA: Sage.

Greenhalgh, T & Taylor, R. (1997). How to read a paper: Papers that go beyond numbers (qualitative research). *British Medical Journal*, 315(7110), 740-743. doi:10.1136/bmj.315.7110.740

Griffin, M.G. (2008). A prospective assessment of auditory startle alteration in rape and physical assault survivors. *Journal of Traumatic Stress*, 21(1), 91-99. doi:10.1002/jts.20300

Groenjian, A.K.; Pynoos, R.S.; Steinberg, A.M.; Endres, D.; Abraham, K.; Geffner, M.E. & Fairbanks, L.A. (2003). Hypothalamic-Pituatary-Arenal activity among Armenian adolescents with PTSD symptoms. *Journal of Traumatic Stress*, 16(4), 319-323. doi:10.1023/A:1024453632458

Grubaugh, A.L.; Magruder, K.M.; Waldrop, A.E.; Alhai, J.D.; Knapp, R.G. & Frueh, B.C. (2005). Subthreshold PTSD in primary care: prevalence, psychiatric disorders, healthcare use and functional status. *Journal of Nervous & Mental Disease*, 193(10), 658-664. doi:10.1097/01.nmd.0000180740.02644.ab

Hansen, M. & Elklit, A. (2011). Predictors of acute stress disorder in response to bank robbery. *European Journal of Psychotraumatology*, 2(0), 5864-5874. doi:10.3402/ejpt.v2i0.5864

Hansen, M. & Elklit, A. (2013). Does acute stress disorder predict post-traumatic stress disorder following bank robbery? *Journal of Interpersonal Violence*, 28(1), 25-44. doi:10.1177/0886260512448848

Hansen, M.; Lasgaard, M. & Elklit, A. (2013). The latent factor structure of acute stress disorder following bank robbery: Testing alternative models in light of the pending DSM-5. *British Journal of Clinical Psychology*, 52(1), 82-91. doi:10.1111/bjc.12002

Harvey, A.G. & Bryant, R.A. (1999). A qualitative investigation of the organization of traumatic memories. *British Journal of Clinical Psychology*, 38(4), 401-405. doi:10.1348/014466599162999

Hauffa, R.; Rief, W.; Brähler, E.; Martin, A.; Mewes, R. & Glaesmer, H. (2011). Lifetime traumatic experiences and post-traumatic stress disorder in the German population: Results of a representative population survey. *Journal of Nervous & Mental Disease*, 199(12), 934-939. doi:10.1097/NMD.0b013e3182392c0d

Hayes, N. (2000). *Doing psychological research.* Philadelphia, PA: Open University Press.

Hembree, E. A., & Foa, E. B. (2004). Promoting cognitive change in posttraumatic stress disorder. In M. A. Reinecke & D. A. Clark (Eds.), *Cognitive therapy across the lifespan: Evidence and practice* (pp. 231–257). New York, NY: Cambridge University Press.

Hetzel, M.D. & McCanne, T.R. (2005). The roles of peritraumatic dissociation, child physical abuse, and child sexual abuse in the development of post-traumatic stress disorder and adult victimisation. *Child Abuse & Neglect*, 29(8), 915-930. Retrieved from 10.1037/a0019892

Hildyard, K.L. & Wolfe, D.A. (2002). Child neglect developmental issues and outcomes. *Child Abuse & Neglect*, 26(6-7), 679-695. Retrieved from http://dx.doi.org/10.1016/S0145-2134(02)00341-1

Horowitz, M.J. (1976). *Stress response syndromes.* New York,NY: Jason Aronson.

Horowitz, M.J. (1986). *Stress Response Syndromes.* (2ne ed.). New York,NY: Jason Aronson.

Horowitz, M.J. & Reinbord, S.P. (1992). Memory, emotion, and response to trauma. In: S.-A. Christianson (Ed.) *Handbook of emotion and memory: research and theory* (pp. 343–357). Hillsdale, NJ: Erlbaum.

Horowitz, M.J; Wilner, N. & Alvarez, W. (1979). Impact of event scale: a measure of subjective stress. *Psychosomatic Medicine*. 41(3), 209-218. Retrieved from http://www.psychosomaticmedicine.org/content/41/3/209.full.pdf+html

Irish, L.A.; Fischer, B.; Fallon, W.; Spoonster, E.; Sledjeski, E.M. & Delahanty, D.L. (2011). Gender differences in PTSD symptoms: an exploration of peritraumatic mechanisms. *Journal of Affective Disorders*, 25(2), 209-216. doi:10.1016/j.janxdis.2010.09.004

Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events: applications of the schema construct. *Social Cognition*, 7(2), 113-136. doi:10.1521/soco.1989.7.2.113

Janssen, P.A.; Holt, V.L.; Sugg, N.K.; Emanuel, I.; Critchlow, C.M. & Henderson, A.D. (2003). Intimate partner violence and adverse pregnancy outcomes: A population-based study. *American Journal of Obstetrics and Gynaecology*, 188(5), 1341-1347. Retrieved from http://www.researchgate.net/publication/10757645_Intimate_partner_violence_and_adverse_pregnancy_outcomes_a_population-based_study/file/32bfe50f9d66943059.pdf

Jirapramukpitak, T.; Harpham, T. & Prince, M. (2011). Family violence and its 'adversity package': A community survey of family violence and adverse mental outcomes among young people. *Social Psychiatry & Psychiatric Epidemiology*, 46(9), 825-831. doi:10.1007/s00127-010-0252-9

Jobson, L. & O'Kearney, R. (2008). Cultural differences in personal identity in post-traumatic stress disorder. *British Journal of Clinical Psychology*, 47(1), 95-109. doi:10.1348/014466507X235953

Johnson, D.M.; Zlotnick, C. & Zimmerman, M. (2003). The clinical relevance of a partial remission specifier for post-traumatic stress disorder. *Journal of Traumatic Stress*, 16(5), 515-518. doi:10.1023/A:1025770814096

Joong-Hwan, O. & Sangmoon, K. (2009). Aging, neighborhood attachment, and fear of crime: Testing reciprocal effects. *Journal of Community Psychology*, 37(1), 21-40. doi:10.1002/jcop.20269

Joseph, S. (2000). Psychometric evaluation of Horowitz's Impact of Event Scale: A review. *Journal of Traumatic Stress*, 13(1), 101-113. doi:10.1023/A:1007777032063

Keen, S.M.; Kutter, C.J.; Niles, B.L. & Krinsley, K.E. (2008). Psychometric properties of PTSD checklist in sample of male veterans. *Journal of Rehabilitation Research & Development*, 45(3), 465-474. doi:10.1682/JRRD.2007.09.0138

Kilpatrick, D.G. & Acierno, R. (2003). Mental health needs of crime victims: Epidemiology and outcomes. *Journal of Traumatic Stress*, 16(2), 19-132. doi:10.1023/A:1022891005388

Kimble, M.O.; Fleming, K. & Bennion, K.A. (2013). Contributors to hypervigilance in a military and civilian sample. *Journal of Interpersonal Violence*, 28(8), 1672-1692. doi:10.1177/0886260512468319

Kirsten, A. & Bruce, D. (2010, November 9). *Why South Africa is so violent and what we should be doing about it* (The Centre for the Study of Violence and Reconciliation). Retrieved from www.csvr.org.za/docs/study/CSVRstatement091110.pdf

Krnic, E.K.; Gagro, A.; Kozaric-Kozaric, D.; Vilibic, M.; Grubisic-Ilic, M.; Folnegovic-Smalc, V.,… Dekaris, D. (2007). Outcome of influenza vaccination in combat-related post-traumatic stress disorder (PTSD) patients. *Clinical and Experimental Immunology*, 149(2), 303-310. doi:10.1111/j.1365-2249.2007.03410.x

Lai, T., Chang, C., Connor, K.M., Lee, L. & Davidson, J.R.T. (2004). Full and partial PTSD among earthquake survivors in rural town. *Journal of Psychiatric Research*, 38(3), 313-322. doi:10.1016/j.jpsychires.2003.08.005

Lee, D.A.; Scragg, P. & Turner, S. (2001). The role of shame and guilt in traumatic events: a clinical model of shame-based and guilt-based PTSD. *British Journal of Medical Psychology*, 74(4), 451-466. doi: 10.1348/000711201161109

Leskin, G.A.; Woodward, S.H.; Young, H.E. & Sheikh, J.I. (2002). Effects of comorbid diagnoses on sleep disturbance in PTSD. *Journal of Psychiatric Research*, 36(6), 449-452. Retrieved from http://dx.doi.org/10.1016/S0022-3956(02)00025-0

Linares, L.O. (2004). Social connection to neighbors, multiple victimization and current health among women residing in high crime neighbourhoods. *Journal of Family Violence*, 19(6), 355-366. doi:10.1007/s10896-004-0680-y

Maack, D.J.; Tull, M.T. & Gratz, K.L. (2012). Experiential avoidance mediates the association between behavioral inhibition and post-traumatic stress disorder. *Cognitive Therapy & Research*, 36(4), 407-416. doi:10.1007/s10608-011-9362-2

MacMillan, H.L.; Fleming, J.E.; Streiner, D.L.; Lin, E.; Boyle, M.H.; Jamieson, E.; Duku, E.K.; Walsh, C.A.; Wong, M.Y.Y. & Beardslee. W.R. (2001). Childhood abuse and lifetime psychopathology in a community sample. *The American Journal of Psychiatry*, 158(11), 1878-1883. doi:10.1176/appi.ajp.158.11.1878

Macritchie, V. J. (2006). *Secondary traumatic stress, level of exposure, empathy and social support in trauma workers.* Master's thesis. University of Witwatersrand. Retrieved March 30, 2010 from the University of Witwatersrand digital thesis.

Marshall, R.D.; Olfson, M.; Hellman, F.; Blanco, C.; Gaurdino, M., & Struening, E.L. (2001). Comorbidity, impairment, and suicidality in subthreshold PTSD. *The American Journal of Psychiatry*, 158(9), 1467-1473. doi:10.1176/appi.ajp.158.9.1467

McMullin, D. & White, J.W. (2006). Long-term effects of labelling a rape experience. *Psychology of Women Quarterly*, 30(1), 96-105. doi:10.1111/j.1471-6402.2006.00266.x

Mellman, T.A.; David, D.; Bustamante, V.; Fins, A.I. & Esposito, K. (2001). Predictors of post-traumatic stress disorder following severe injury. *Depression and anxiety*, 14(4), 226-231. doi:10.1002/da.1071

Metcalfe, J. & Jacobs, W.J. (1998). Emotional memory: the effects of stress on 'cool' and 'hot' memory systems. In: D.L. Medin (Ed.) *The psychology of learning and motivation* (vol. 38, pp. 187–222). New York, NY: Academic Press.

Moller, V. (2005). Resilient or resigned? Criminal victimisation and quality of life in South Africa. *Social Indicators Research*, 72(3)**,** 263-317. Retrieved from http://dx.doi.org/10.1007/s11205-004-5584-y

Monson, C.M.; Rodriguez, B.F., & Warner, R. (2005). Cognitive-behavioural therapy for PTSD in the real world: Do interpersonal relationships make a real difference? *Journal of Clinical Psychology*, 61(6), 751-761. doi:10.1002/jclp.20096

Mowrer, O.H. (1956). Two-factor learning theory reconsidered, with special reference to secondary reinforcement and the concept of habit. *Psychological Review*, 63(2), 114-128. doi: 10.1037/h0040613

Mylle, J. & Maes, M. (2004). Partial post-traumatic stress disorder revisited. *Journal of Affective Disorders*, 78(1), 37-48. doi:10.1016/S0165-0327(02)00218-5

Navalta, C.P.; Polcari, A.; Webster, D.M.; Boghossian, A. & Teicher, M.H., (2006). Effects of childhood sexual abuse on neuropsychological and cognitive function in college women. *The Journal of Neuropsychiatry and Clinical Neurosciences*, 18(1), 45-53. doi:10.1176/appi.neuropsych.18.1.45

Newham, G. (2008). Reclaiming our homes? Tackling residential robbery in Gauteng. *SA Crime Quarterly*, No.23, 7-12. Retrieved from http://www.issafrica.org/uploads/CQ23NEWHAM.PDF

Newham, G. (2009). Cops and robbers: A new approach. The Gauteng aggravated robbery strategy. *SA Crime Quarterly*, No.29, 3-8. Retrieved from http://www.issafrica.org/uploads/CQ29NEWHAM.PDF

Nixon, R.D.V.; Resick, P.A., & Nishith, P. (2004). An exploration of comorbid depression among female victims of intimate partner violence with post-traumatic stress disorder. *Journal of Affective Disorders*, 82(2), 315-320. doi:10.1016/j.jad.2004.01.008

Norman, S.B.; Means-Christensen, A.J.; Craske, M.G.; Sherbourne, C.D.; Roy-Byrne, P.P., & Stein, M.B. (2006). Associations between psychological trauma and physical illness in primary care. *Journal of Traumatic Stress*, 19(4), 461-470. doi: 1002/jts.20129

Osofsky, J.D. (1999). The impact of violence on children. *The future of children*, 9(3), 33-49. Retrieved from http://www.jstor.org/stable/1602780

Padesky, C.A. (1994). Schema change processes in cognitive therapy. *Clinical Psychology and Psychotherapy*, 1(5), 267-278. doi:10.1002/cpp.5640010502

Pallavi, N.; Mechanic, M.B., & Resick, P.A. (2000). Prior interpersonal trauma: The contribution to current PTSD symptoms in female rape victims. *Journal of Abnormal Psychology*, 109(1), 20-25. doi:10.1037/0021-843X.109.1.20

Paunović, N. & Öst, L. (2004). Clinical validation of the Swedish version of the quality of life inventory in crime victims with post-traumatic stress disorder and a nonclinical sample. *Journal of Psychopathology and Behavioral Assessment*, 26(1), 15-21. doi:10.1023/B:JOBA.0000007452.65270.13

Peterlin, B.L.; Nijjar, S.S., & Tietjen, G.E. (2011). Post-traumatic stress disorder and migraine: Epidemiology, sex differences, and potential mechanisms. *Headache: The Journal of Head & Face Pain*, 51(6), 860-868. doi:10.1111/j.1526-4610.2011.01907.x

Peterlin, B.L.; Tietjen, G.; Meng, S.; Lidicker. J., & Bigl, M. (2008). Post-traumatic stress disorder in episodic and chronic migraine. Headache*: The Journal of Head & Face Pain*, 48(4), 517-522. doi:10.1111/j.1526-4610.2008.00917.x

Pico-Alfonso, M.A. (2005). Psychological intimate partner violence: the major predictor of post-traumatic stress disorder in abused women. *Neuroscience and Biobehavioural Reviews*, 29(1), 181-193. doi:10.1016/j.neubiorev.2004.08.010

Pietrzak, R.H.; Goldstein, M.B.; Malley, J.C.; Johnson, D.C., & Southwick, S.M. (2009). Subsyndromal post-traumatic stress disorder is associated with health and psychosocial difficulties in veterans of operations enduring freedom and Iraqi freedom. *Depression and Anxiety*, 26(8), 739-744. doi:10.1002/da.20574

Pietrzak, R.H.; Goldstein, R.B.; Southwick, S.M., & Grant, B.F. (2011). Prevalence and Axis I comorbidity of full and partial post-traumatic stress disorder in the United States: Results from wave 2 of the National Epidemiologic Survey on alcohol and related conditions. *Journal of Anxiety Disorders*, 25(3), 456-465. doi:10.1016/j.janxdis.2010.11.010

Pineles, S.L.; Mostoufi, S.M.; Ready, C.B.; Street, A.E.; Griffin, M.G., & Resick, P.A. (2011). Trauma reactivity, avoidant coping, and PTSD symptoms: A moderating relationship? *Journal of Abnormal Psychology*, 120(1), 240-246. doi:10.1037/a0022123

Pole, N.; Neylan, T.c.; Best, S.R.; Orr, S.P., & Marmar, C.R. (2003). Fear-potentiated startle and post-traumatic stress symptoms in urban police officers. *Journal of Traumatic Stress*, 16(5), 471-479. doi:10.1023/A:1025758411370

Potter, W.J. (1996). *An analysis of thinking and research about qualitative methods*. New Jersey, NJ: Lawrence Erlbaum Associates.

Price, J.P. (2007). Cognitive schemas, defence mechanisms and post-traumatic stress symptomatology. *Psychology & Psychotherapy: Theory, Research & Practice*, 80(3), 343-353. doi:10.1348/147608306X144178

Renzetti, C.M. & Raymond, M.L. (1993). *Researching sensitive topics*. California, CA: Sage.

Revington, N.; Martin, L., & Seedat, S. (2011). Is there a relationship between the number of abuse experiences and measures of neurocognition in trauma exposed youth. *African Journal of Traumatic Stress*, 2(2), 92-103. Retrieved from *petercaldermanfoundation.org/AfricanJnl/AJTS_V1N4.pdf*

Reynolds, M. & Brewin, C.R. (1999). Intrusive memories in depression and post-traumatic stress disorder. *Behaviour Research and Therapy, 37*, 201–215. doi:10.1016/S0005-7967(98)00013-8

Roodman, A.A. & Clum, G.A. (2001). Revictimization rates and method variance: A meta-analysis. *Clinical Psychology Review*, 21(2), 183-204. doi:10.1016/S0272-7358(99)00045-8

Rosenbaum, L. (2004). Post-traumatic stress disorder: The chameleon of psychiatry. *Nordic Journal of Psychiatry*, 58(5), 343-348. doi:10.1080/08039480410005927

Roy-Byrne, P.; Arguelles, L.; Vitek, M.E.; Goldberg, J,; Keane, T.M.; True, W.R., & Pitman, R.K. (2004). Persistence and change of PTSD symptomology: A longitudinal co-twin control analysis of the Vietnam era twin registry. *Social Psychiatry & Psychiatry Epidemiology*, 39(9), 681-685. doi:10.1007/s00127-004-0810-0

Sadock, B.J. & Sadock, V.A. (2003). *Kaplan & Sadock's synopsis of psychiatry: Behavioral sciences/ clinical psychiatry* (9th ed.). Philadelphia, PA: Lippincott Williams & Wilkens.

Schönfeld, S.; Böllinghaus, A.E.; Böllinghaus, I., & Rief, W. (2007). Overgeneral memory and suppression of trauma memories in post-traumatic stress disorder. *Memory*, 15(3), 339-352. doi: 10.1080/09658210701256571

Schreuder, B.J.N.; Kleijn, W.C., & Rooijmans, H.G.M. (2000). Nocturnal re-experiencing more than forty years after war trauma. *Journal of Traumatic Stress*, 13(3), 453-463. doi:10.1023/A:1007733324351

Schützwohl, M. & Maercker, A. (1999). Effects of varying diagnostic criteria for post-traumatic stress disorder are endorsing the concept of partial PTSD. *Journal of Traumatic Stress*, 12(1), 155-165. doi:10.1023/A:1024706702133

Schwiezer, S. & Dalgleish, T. (2011). Emotional working memory capacity in post-traumatic stress disorder (PTSD). *Behaviour Research and Therapy*, 49(8), 498-504. doi:10.1016/j.brat.2011.05.007

Scott-Storey, K. (2011). Cumulative abuse: Do things add up? An evaluation of the conceptualization, operationalization, and methodological approaches in the study of the phenomenon of cumulative abuse. *Trauma Violence & Abuse*, 12(3), 135-150. doi:10.1177/1524838011404253

Seale, C., Gobo, G., Gubrium, J.F., & Silverman, D. (2004). *Qualitative research practice*. London, England: Sage.

Shepherd, J. (1988). Supporting victims of violent crime: Doctors should make links with victim support schemes. *British Medical Journal (International Edition)*, 297(6660), 1353. Retrieved from http://pubmedcentralcanada.ca/picrender.cgi?artid=1089247&blobtype=pdf

Shiner, B.; Bateman, D.; Young-Xu, Y.; Zayed, M.; Harmon, A.L.; Pomerantz, A., & Watts, B.V. (2012). Comparing the stability of diagnosis in full vs. partial post-traumatic stress disorder. *Journal of Nervous & Mental Disease*, 200(6), 520-525. doi:10.1097/NMD.0b013e318257c6da

Shonk, S.M. & Cicchetti, D. (2001). Maltreatment, competency deficits, and risk for academic and behavioural maladjustment. *Developmental Psychology*, 3(1), 3-17. doi:10.1037/0012-1649.37.1.3

Solomon, E.P. & Heide, K.M. (2005). The biology of trauma: Implications for treatment. *Journal of Interpersonal Violence*, 20(1), 51-60. doi:10.1177/0886260504268119

South Africa's Crime Statistics: What it means for 2010. (2009, November 23). Retrieved from Pasco Risk Management website http://www.pascorisk.com/world-cup-2010/south-africas-crime-statistics-what-it-means-for-2010

Stansfeld, F.D. (2002). *Beyond the victim: The traumatic effects of violent crime- an educational psychological perspective.* Master's thesis. University of South Africa. Retrieved on March 30, 2010, from the University of South Africa's Digital Thesis.

Stapleton, J.A., Taylor, S., & Asmundson, G.J.G. (2006). Effects of three PTSD treatments on anger and guilt: Exposure therapy, eye movement desensitization and reprocessing, and relaxation training. *Journal of Traumatic Stress*, 19(1), 19-28. doi:10.1002/jts.20095

Steenkamp, M.M.; Nickerson, A.; Maguen, S.; Dickstein, B.D.; Nash, W.P., & Litz, B.T. (2012). Latent classes of PTSD symptoms in Vietnam veterans. *Behavior Modification*, 36(6), 857-874. doi:10.1177/0145445512450908

Stephens, C. & Long, N. (1999). Post-traumatic stress disorder in the New Zealand police: The moderating role of social support following traumatic stress. *Anxiety, Stress, and Coping*, 12(3), 247-264. doi: 10.1080/10615809908250477

Sternberg, R.J. (2009). *Cognitive psychology (5th ed.).* Belmont, CA: Cengage Learning.

Suliman, S.; Mkabile, S.G.; Finchman, D.S.; Ahmed, R.; Stein, D.J., & Seedat, S. (2009). Cumulative effect of multiple trauma on symptoms of post-traumatic stress disorder, anxiety, and depression in adolescents. *Comprehensive Psychiatry*, 50(2), 121-127. doi:10.1016/j.comppsych.2008.06.006

Teicher, M.H.; Samson, J.A.; Polcari, A., & McGreenery, C.E. (2006). Sticks, stones, and hurtful words: Relative effects of various forms of childhood maltreatment. *The American Journal of Psychiatry*, 163(6), 993-1000. doi:10.1176/appi.ajp.163.6.993

Tellis, W. (1997). Application of a case study methodology. *The Qualitative Report,* 3(3), 1-17. Retrieved September 4, 2007, from http://www.nova.edu/ssss/QR/QR3-3/tellis2html

The South African Police Service (SAPS). (2013). Crime statistics overview: National. Retrieved from Crime Stats SA website http://www.crimestatssa.com/national.php

Thrasher, S.; Power, M.; Morant, N.; Marks, I., & Dalgleish, T. (2010). Social support moderates outcome in a randomized controlled trial of exposure therapy and (or) cognitive restructuring for chronic post-traumatic stress disorder. *The Canadian Journal of Psychiatry-Revuebcanadienne de psychiatrie*, 55(3), 187-190. Retrieved from http://publications.cpa-apc.org/media.php?mid=927

Tseloni, A. & Pease. K. (2003). Repeat personal victimization: 'Boosts' or 'Flags'? *British Journal of Criminology*, 43(1), 196-212. doi:10.1093/bjc/43.1.196

Ullman, S.E.; Townsend, S.M.; Filipas, H.H., & Starzynski, L.L. (2007). Structural models of the relations of assault severity, social support, avoidance coping, self-blame, and PTSD among sexual assault victims. *Psychology of Women Quarterly*, 31(1), 23-37. doi10.1111/j.1471-6402.2007.00328

Van Zyl, M.; Oosthuizen, P.P., & Seedat, S. (2008). Post traumatic stress disorder: Undiagnosed cases in a tertiary inpatient setting. *African Journal of Psychiatry*, 11(2), 119-122. Retrieved from http://ajop.co.za/Journals/May2008/May08_5.pdf

Vermetten, E. & Bremner, J.D. (2002). Circuits and systems in stress. II. Applications to neurobiology and treatment in post-traumatic stress disorder. *Depression and Anxiety*, 16(1), 14-38. doi:10.1002/da.10017

Vila, G., Porche, L. & Mouren-Someoni, M. (1999). An 18-month longitudinal study of post-traumatic disorders in children who were taken hostage in their school. *Psychosomatic Medicine*, 61(6), 746-754. Retrieved from http://www.psychosomaticmedicine.org/content/61/6/746.full.pdf+html

Wolpe, J. (1990). *The practice of behavior therapy* (4th ed.). New York: Pergamon

Walker, J.; Archer, J., & Davies, M. (2005). Effects of male rape on psychological functioning. *British Journal of Clinical Psychology*, 44(3), 445-451. doi: 10.1348/014466505X52750

Walker, J.; Archer, J., & Davies, M. (2005). Effects of rape on men: A descriptive analysis. *Archives of Sexual Behaviour*, 34(1), 69-80. doi:10.1007/s10508-005-1001-0

Watt, M.H.; Ranby, K.W.; Meade, C.S.; Sikkema, K.J.; MacFarlane, J.C.; Skinner, D.; Pieterse, D., & Kalichman, S.C. (2012). Post-traumatic stress disorder symptoms mediate the relationship between traumatic experiences and drinking behavior among women attending alcohol-serving venues in a South African township. *Journal of Studies on Alcohol and Drugs*, 73(12), 549-558. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3364321/pdf/jsad549.pdf

Weiss, D.S. (2007). Conundrums in a theory of disturbed dreaming: Comment on Levin and Nielsen (2007). *Psychological Bulletin*, 133(3), 529-532. doi:10.1037/0033-2909.133.3.529

Weiss, D.S., Marmar, C.R., Schlenger, W.E., Fairbank, J.A., Jordan, B.K., Hough, R.L., & Kulka, R.A. (1992). The prevalence of lifetime and partial post-traumatic stress disorder in Vietnam theater veterans. *Journal of Traumatic Stress*, 5(3), 365-376. doi:10.1002/jts.2490050304

Whitley, B.E. (2002). *Principles of research in behavioural science* (2nd ed.). New York, NY: McGraw-Hill.

Williams, S.L.; Williams, D.R.; Stein, D.J.; Seedat, S.; Jackson, P.B., & Moomal, H. (2007). Multiple traumatic events and psychological distress: The South Africa stress and health study. *Journal of Traumatic Stress*, 20(5), 845-855. doi:10.1002/jts.20252

Willig, C. & Stainton-Rogers, W. (Ed.). (2008). *The SAGE handbook of qualitative research in psychology*. London, England: Sage.

Winkel, F.W.; Blaauw, E.; Sheridan, L., & Baldry, A.C. (2003). Repeat victimization and vulnerability for coping failure: A propective examination of a potential risk factor. *Psychology, Crime & Law*, 9(1), 87-96. doi: 10.1080/10683160308137

Wohlfarth, T.D., van den Brink, W., Winkel, F., & ter Smitten, M. (2003). Screening for post-traumatic stress disorder: An evaluation of two self-report scales among crime victims. *Psychological Assessment*, 15(1), 101-109. doi:10.1037/1040-3590.15.1.101

Yarvis, J.S. & Schiess, L. (2008). Subthreshold post-traumatic stress disorder (PTSD) as a predictor of depression, alcohol use, and health problems in veterans. *Journal of Workplace Behavioral Health*, 23(4), 395-424. doi:10.1080/15555240802547801

Zlotnick, C.; Franklin, C.L., & Zimmerman, M. (2002). Does "subthreshold" post-traumatic stress disorder have any clinical relevance? *Comprehensive Psychiatry*, 43(6), 413-419. doi:10.1053/comp.2002.35900

# APPENDIX A:

## Consent form

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

**FACULTY OF HUMANITIES**

Dear Sir/ Madam

This research study is titled: "*The lurking shadow: A qualitative study of the experience of residual symptoms following a violent crime*" and explores the long lasting effects of violent crimes, specifically armed robbery, motor vehicle hijacking and assaults.

Participation in this research is threefold. Initially you will be asked to complete a Posttraumatic Stress Disorder Checklist, which consists of 17 questions. Following the questionnaire you may be asked to complete the Impact of Event Scale, which consists of 15 questions. Thereafter you may be asked to participate in an interview. During this interview the nature of the crime as well as any residual effects thereof will be explored. Although it may be difficult to explore the traumatic event you have undergone, the findings of this research will further understanding of the lasting effects of crime as well as potentially assist other victims of crime who may undergo the same experiences. If necessary, a debriefing session will follow this interview at no cost to you.

Participation in this study is entirely voluntary and you may choose to withdraw at any time throughout this process. If you should choose to participate, all gathered information will be treated as confidential and you will remain anonymous as code names will be used in the publishing of the research. If you should choose to withdraw from the study, all information you have provided up to that point will be destroyed. The only persons who will have access to the gathered information are the researcher as well as her promoter.

Following this research project, data collected will be stored in the Department of Humanities for 15 years following the commencement of this study. This data may also be used for future research projects.

Should you participate in this research, you are welcome to contact the researcher in December 2013 to enquire about the research findings.

NAME: _____ DATE: _____

SIGNATURE: _____ PLACE: _____

Thank you for your time and participation

Celestè-Mari Benadé
Contact number: 0820482911

**APPENDIX B:**
**Audio tape consent**

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

**FACULTY OF HUMANITIES**

# AUDIO TAPE CONSENT

I _____ hereby give permission to Celestè-Mari Benadé to audio record the interview with me pertaining to her Master's thesis.

I have read and understood the attached letter of consent. I agree that this interview will be audio taped and later transcribed for research analysis purposes. I also understand that the information gathered will be stored in the Department of Humanities for a minimum of 15 years from the commencement of the research.

NAME: _____ DATE: _____

SIGNATURE: _____ PLACE: _____

# APPENDIX C:

## Semi-structured interview schedule

**Note:** It is important to note that this is just a general guideline of questions that the interviewer used during the semi-structured interviews. All of the questions were not posed to every research participant as the interview focused on the individual's experience of the crime and the effects that they experienced thereafter.

## Welcoming

Welcoming participant and preparing them for questioning.

## Biographical information

- Sex:
- Age:
- Race:
- Highest qualification/ standard passed:
- Current occupation:
- Place of residence:
- Marital status:

## Previous psychiatric history

- Did you have any conditions prior to the traumatic incident that affected you on a regular basis, for example a low mood, feeling anxious or being irritable?
    - If yes – has it changed following the incident?
- Have you ever received a diagnosis for a psychiatric condition?

  - If yes - what condition? When were you diagnosed? Have you received any treatment for that condition? What have you experienced (e.g. emotions or behaviour) since the traumatic incident that you have not experienced during your previous condition? Or has any of your previous symptoms become worsened following the traumatic incident? If yes- what and how?
- Have you ever experienced a previous crime?
  - If yes – get details
  - Has that experience influenced your experience of the most recent crime?
  - Did you suffer from any residual effects of that crime?

## The incident

- How long ago did the incident occur?
- What type of incident was it? Was it a hijacking, armed robbery/ assault?
- What time of the day did it happen?
- Were you alone or were others involved? (e.g. children/ friends/ spouse?)
- Where did the event occur? (e.g. home, shopping centre, friends?)
- How long did the event take?
- Were you hurt during the incident?
  - If yes, details and recovery details.
- Tell me about the incident in as much detail as you can.
- Where there any parts of the story that still made you feel anxious, angry or fearful?
  - Which part?
  - Does it always make you feel these emotions?
- Following the event, could you share your experiences with family or friends?
  - With whom could you share it?
  - Do you feel that it helped you?
  - In what way?
- Did you seek therapy/ counselling following the incident?
  - No - why not
  - Yes - how long? Do you feel it was effective?
  - Have you been prescribed any medication following the incident? What? How long did you use it? Are you still on medication? What? Doses?

- Have you ever been diagnosed with PTSD?
    - When?
    - Do you still suffer from PTSD? When were you diagnosed?
- What, according to you, helped you resolve this incident?

## Effects of the incident

- How were you affected immediately following the trauma?
- Do you feel that the trauma still impacts your life?
    - No - when did it stop? What helped you in that process?
    - Yes - what is the lasting effects?
- Are there times when something still reminds you of the incident?
    - What?
    - How often does this happen?
    - What emotions do you experience?
    - What physical reactions do you experience?
    - What do you do to alleviate these emotions?
- Do you still, at times, feel anger, fear, anxiety, guilt or shame?
    - How often?
- Did you become more irritable following the incident?
- Has the incident made you feel more unsafe in general?
- Do you feel that the incident influenced your social relationships? In what way?
- Did you stop partaking in activities that you enjoyed before?
- Did this traumatic event influence your relationship with a loved one? In what way?
- Did it impact you financially?
- Did the event impact on your ability to work?
- Did the event influence your thinking in general? Did it influence your ability to concentrate or your cognitive functioning in any way?
    - How?
    - Is it still present?
    - How do you deal with it?
    - Were these difficulties there before? Did it worsen or lessen?
- Do you scare more easily following the incident?

- Has the evnt changed any of your habits?
- Have you become more physically ill following the incident?
- Have you made any significant changes in your life following the trauma? (e.g. moving, separating or divorce?)
- Did the way you view the wold change following the incident?
- Did the way you view yourself change following the incident?

## Conclusion

- Is there anything else with regards to the event or effects thereof that I have not asked that you feel is important for me to know?
- If I need any additional information may I contact you again?
- Thanking &/ referral for therapy if necessary.

# APPENDIX D:

## Organisations that can assist with trauma counselling at no charge to the research participant

Dear Sir/ Madam

Please feel free to contact any of the organisations or clinics listed below if you feel the need to receive counselling for the traumatic event that you have experienced. I can also arrange trauma counselling with these organisations if you would like me to do so.

The counselling will be provided free of charge.

| Clinic | Telephone number |
|---|---|
| Lifeline | Office: (012) 342-9000<br>Emergency: (012) 342-2222 |
| Sadag (South African Depression & Anxiety Group) | Office: (011) 262-6396<br>Suicidal emergency: 0800 567 567 |
| National Counselling Line | Office: 0861 322 322 |
| LRA | Office: 071 592 9690 |
| Leigh Matthews Trust Centres | Office: (011) 226 2200 |