

**The Perceptual Thinking Processes of Victims of Repetitive Armed  
Robberies in the Workplace: A Rorschach Study**

by

Julie D.M. E'Silva

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Supervisor: Dr M. Aronstam

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I hereby declare that this dissertation is my own work and that it has not been submitted for a degree at any other university. In addition, all the literature sources which have been used or referred to have been included in a complete list of references.

## **ACKNOWLEDGEMENTS**

“Some people come into our lives and quickly go, some stay for a while and leave footprints on our hearts, and we are never the same.”

(Author unknown)

I would like to acknowledge my sincere appreciation to the sample group of participants, without whom, this study would not have been possible. For their personal time, which these gentlemen afforded me, in completing the psychometric testing and interviews, my gratitude is heartfelt. Their contribution to my own understanding of the impact of trauma, as well as to the field of Clinical Psychology is no doubt, an informative one.

To my supervisor, Dr Maurice Aronstam, I extend my thanks for his insight, input, time and participation in assisting me with this research endeavour.

As Janof-Bulman (1992) so aptly articulates, when one begins to explore the domains of trauma and victimisation, there is a natural tendency to become acutely aware of one's own good fortune and life's gifts, one of which is always one's family. I am both grateful and thankful for their safety, as well as their support during a time of much 'unavailability'.

## **ABSTRACT**

The current study describes the impact of trauma on the perceptual thinking processes of participants who have sustained repeated criminal victimisation in South Africa. Fifteen adult males, (mean age 40.73 years) participated voluntarily in this descriptive study. The Rorschach Inkblot Method (RIM) is the psychometric instrument used to describe the participants and Exner's Comprehensive System (CS) is the method of interpretation employed. The Perceptual Thinking Index (PTI) is the cluster of variables selected to describe each participant's level of reality testing and perceptual functioning. Together with this, the D and Adjusted D Score variables are discussed to describe the participants' overall and current coping capacities. From the research findings yielded in this study, it appears that the majority of these participants (73%) can be described as experiencing problems in terms of their perceptual thinking processes. They are also unable to appropriately engage in accurate reality testing. The results of the research study may serve as an incentive for further studies of this nature as according to the RIM, participants with this level of impaired reality testing generally present with psychotic features. However, these research results were found in participants who present with an absence of a psychotic or any schizophrenic type disorder diagnoses. Other researchers who used the RIM to assess trauma victims have found results similar to this. Furthermore, participants who present with this level of impaired reality testing, generally experience severe problems in coping with basic psychological aspects of daily functioning. This however, does not appear to be the case with this sample group, which was one of the motivating factors for conducting this research. A concluding suggestion is made for possible research into investigating how, and at what expense, other psychological features of functioning are employed, in order to manage in a seemingly well-adaptive manner.

## **Keywords**

Armed Robbery, Workplace, Repetitive and Multiple Victimisation, Trauma, Exner, Rorschach Inkblot Method (RIM), Comprehensive System (CS), Perceptual Thinking Index (PTI), Controls and Stress Tolerance (D & Adjusted D Scores), Impaired Reality.

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## CHAPTER 1

### INTRODUCTION TO THE STUDY

The current study is concerned with the impact on victims of repeated armed robbery in the workplace, particularly that which transpires in retail businesses. Although armed robbery in retail outlets is not a 'new' occurrence, literature on this aspect of crime is limited (Stewart & Davis, 2003). Research and literature on repetitive armed robberies that take place in the same workplace (in this case the retail business) appear to be even more sparse. Thus information on the impact which repetitive armed robberies have on these victims is also limited.

#### 1.1 Structure of the research study

The structure of the research contents that follows is summarised as follows:

A basic outline, providing the reader with the general details of the current study is provided in Chapter 1. The context of the research problem refers to the nature of crime and violence within the South African population. In this respect, background information regarding the context of the problem is included, as is the nature of the study, research aims, objects and selected method. In addition, the chapter details the manner in which this study was approached, how participants were recruited and the specific criteria for participant selection. Definitions of the key constructs and details of the scientific value of such a study form the concluding comments in Chapter 1.

The principal aim of Chapter 2 is to isolate one facet of the broad topic of trauma, and to elaborate on the theoretical underpinnings of the effects, reactions, responses or impact of victimisation, which then results in different types of traumatic symptom manifestation. This chapter thus provides a review of past and present knowledge and understanding regarding what is known about the impact, or effects of traumatic episodes upon victims. Moving from a wide view of the responses and reactions of trauma victims in general, the discussion

becomes more narrowly focused on the more specific domain of the effects of armed robbery victimisation within the workplace.

Chapter 3 focuses on the actual assessment tool for the current study, namely the RIM. The CS, as the applied method in the RIM, is described in some detail. Specific inclusions comprise the administration, application, scoring and interpretation of the test. The various variables and cluster groups are briefly described and the chapter concludes by referring to various Rorschach research studies. The RIM studies that have been referred to herein, are those that have found that some victims of trauma present with perceptual distortions and impaired or atypical reality testing.

The methodology of the current study is detailed in Chapter 4. Specification in terms of the sample participants is provided in respect of recruitment, selection criteria, and demographic details of the sample group. The data collection procedures are discussed, as well as the particular administration of the test. This chapter concludes with a brief section regarding interrater reliability, test validity and confounding variables.

The results of the current study are discussed in Chapter 5. Prior to listing the findings of the study, information regarding other pertinent variables within the RIM is briefly discussed, namely Lambda and EB styles. The overall results are then discussed in terms of the variables that originally formed the focus of the research, as well as any other variables found to be similar across participants.

Chapter 6 provides a synopsis and description of the results of the research.

In the final chapter of the study, Chapter 7 discusses various conclusions made by the researcher as well as offers certain recommendations.

## 1.2 Orientation to the context of the problem

Terr proffered approximately 12 years ago, that, “psychic trauma is one of the most contagious mental conditions known to psychiatry at this time” (in Early, 1993, p. 21). Now, in 2003, not much appears to have changed. Literature on traumatic stress resulting from all forms of human suffering, no longer simply fill up space on bookshelves, but instead, occupy entire rooms (Figley in Wilson & Keane, 1997). This serves to highlight the amount of interest that is generated in terms of understanding stress and its effects on individuals (Bloom in Shalev, Yehuda & McFarlane, 2000).

Whatever form criminal victimisation may take, the effect upon the individual can be severely traumatising (Scaer, 2001). Violence and crime, specifically those involving armed robbery, have the potential to shatter previously held views of a benevolent world (Janoff-Bulman, 1992). The trauma that results subsequent to an armed robbery often leads to excessively high levels of stress, anxiety and emotional distress (Pillay & Claase-Schutte, 2004).

Violent crime plays a significant role in the onset of mental health problems, and the trauma resulting from such criminal acts has both short and long-term repercussions (Peltzer, 2000). These include psychological disturbances, emotional difficulties, physical injuries, permanent disability and interpersonal problems. A significant number of violent crimes in South Africa result in loss of life (Vetere & Melup; Hansen, Kilpatric, Falsetti & Resnick in Peltzer, 2000). On an interpersonal level, experiences of excessive stress can significantly affect the victim’s family life in a negative manner. The traumatised individual may be unable to cope with the overwhelming feelings of anger, frustration, and inner conflict, which in turn can result in violent behaviour (Pillay & Claase-Schutte, 2004). The range of detrimental, psychological effects on victims is expansive and could include generalised anxiety,

depression, social adjustment, psychosomatic complaints, and the onset of Posttraumatic Stress Disorder (PTSD) (Stewart & Davis, 2003).

Armed robberies imply the use of weapons, which in turn create a situation where the victim is threatened with physical injury, or even possible loss of life. Weapons are used in robberies to intimidate victims as well as ensure co-operation and generally engender extreme levels of fear (Mouzos & Carcach, 2001). Armed robberies create a climate wherein victims feel that their lives are seriously jeopardised. In such life-threatening contexts, the individual often feels that impending death is a definite possibility (Stewart & Davis, 2003). Confrontations with the possibility of one's own premature death result in significant emotional distress. Langs (1997) coined the term 'death anxiety' to give definition to this stress-induced affective state, which results from an overwhelming fear of premature loss of life. Armed robbery poses a 'predatory threat' to the victim that is accompanied by an intense fear of death. According to Langs (1997), predatory threats include forms of non-fatal physical harm, as well as psychological assaults. These threats can instil extreme anxieties, to the extent that they inhibit the optimal functioning of the victim. Optimal functioning is hindered due to the fact that the victim's emotional distress may result in maladaptive behaviours, physical illness, and may even lead to self-destructive acts. Overall, such death anxiety has potentially significant and detrimental effects on the actual physical life, as well as quality of life, of the individual.

Professionals investigating, as well as working with traumatised populations and disorders, use the term 'traumatic stress' to describe the outcomes resulting from trauma-inducing contexts and events (Van der Kolk, McFarlane & Weisaeth, 1996; Shalev, et al., 2000).

Traumatic stress embraces all facets of traumatisation, as well its immediate and long-term

responses and recovery (Figley in Shalev et al., 2000). By definition, traumatic stress implies two main factors, namely stress and the mental traumatising that led to the stress.

### 1.3 Rationale for research

#### **Analysis of the Problem: Trauma and violent crime in South Africa**

Trauma as a phenomenon permeates within all nations and across all continents. The literature confirms this world-wide proliferation of trauma, created by violent acts as well as both natural and manmade disasters (Scaer, 2001). Over the years it has attracted significant global attention and has been extensively investigated by researchers. Traumatic events have occurred throughout history and will no doubt continue well into the future. As stated by Van der Kolk et al. (1996, p.3), "Experiencing trauma is an essential part of being human; history is written in blood."

Narrowing the focus of trauma from a world-wide stage to a more specific geographical region, the researcher's interest is directed to the context of South Africa. In this country, trauma resulting from violent crimes of numerous descriptions is excessively high (Schonteich, 2002; Masuku, 2002). The research conducted in South Africa positions the country as an extremely violent geographical area, second only to those countries currently experiencing war (Friedland, 1999; Peltzer, 2000; Stansfeld, 2002; Van Niekerk, 2002; Stewart & Davis, 2003). South Africa is, however, distinctly separated from other crime-ridden countries, not only due to the volume of crimes but also due to the type of violence which accompanies them (Masuku, 2002).

In 1999, Newman (in Fischer, 2002) concluded that the annual number of South Africans who are directly impacted by criminal violence in this country is in excess of 1.5 million. National crime statistics recorded by the police force have been made available for public scrutiny since 1994. From this date, up until 2001, the figures indicating crime levels in

South Africa have been unacceptably high (Schonteich, 2002). Thus the South African population has had to contend with the high prevalence of crime and violence as a reality of daily life. Living with this constant type of 'on alert' mode of reality can pose significant difficulties in so far as the recovery of the victim is concerned, as well as make victims vulnerable to the development of physiological and psychological problems. In addition, it can result in vicarious traumatising to those who witness, or are constantly informed of the victimisation of others within the environment.

While certain crime statistics have been reported as having been on the decline between the period 1994 until 2003, recorded cases of armed robbery indicate a progressive increase (Stewart & Davis, 2003; Leggett, 2003). The official South African Police Service (SAPS) statistics categorise all types of robberies as 'violent property crime', which comprises car hijackings, armed robberies, housebreakings, common robberies and hold-ups of banks and other businesses, large and small. Between the years 2000 and 2001, there were 116 700 cases of armed robbery, recorded in the SAPS performance report (Masuku, 2002). Despite the fact that armed robberies are viewed as heavily underreported on a national scale, it is still considered to be the one type of crime raising the most concerns amongst officials attempting to maintain law and order (Leggett, 2003). Trauma resulting from armed robbery, can thus no longer be narrowly viewed as an unexpected, once-off occurrence, but rather should be recognised as having mushroomed into a repetitive phenomenon.

Pillay and Claase-Schutte (2004, p. 123) state that "armed robberies are traumatic and generally lead to stress reactions". In a research study on victims of armed robberies, the findings suggest that 80% of the participants experienced adverse psychological effects six months subsequent to the actual event (Gabor, 1998 cited in Pillay & Claase-Schutte, 2004).

#### 1.4 Motivation for research

Crime trauma has been researched fairly extensively. According to the literature (Frieze & Bookwala in Zeidner & Endler, 1996), initial research endeavours carried out on criminal victimisation, concentrated on studying different types of victims of crime independently. The similarities found between victims of such traumas were then combined and used to improve understanding of crime trauma in general. However, these authors have recommended that new research should focus on investigating trauma victims that are homogeneous, in respect of the type of trauma that has been sustained. New findings can thus be compared to the existing body of knowledge, in order to determine whether different types of trauma have similar and varying effects on victims.

To use PTSD as an example of current research findings, Herman (in Van Niekerk, 2002) refers to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) and states that certain symptoms of PTSD are not included in the manual's criteria. These include the pathological use of dysregulation, somatisation, and dissociation, which have been found to be associated with ongoing and repetitive types of trauma.

In the current research, 15 small business owners who have been repeatedly subjected to armed robberies in the same place of employ, were invited to participate in the study. The factors that influenced the researcher's motivation for the current study, are as follows:

- **Awareness of the problem**

The researcher's interest in conducting a study on this type of victim was influenced by awareness of the prevalence of repetitive armed hold-ups in the same Gauteng-based businesses. As indicated previously, armed robbery figures are consistently increasing in the Gauteng province, recording the highest levels (47.2%) of retail robbery in South Africa (Stewart & Davis, 2003).

Trauma resulting from repetitive victimisation in the same manner and location may differ in terms of its presentation, as compared to other types of trauma. Frieze and Bookwala (in Zeidner & Edner, 1996) refer to research conducted on victims of crime, which indicated significant levels of stress and fears of repeat victimisation. According to this literature, unlike some other types of trauma where repeat incidences often result in less stressful reactions, victims traumatised by crime reacted differently to repeat attacks. The difference was noted in research done with bank workers, who had been the victims of repeated armed robberies. It was found that they displayed heightened stress reactions, meaning that they had not become desensitised. The reason for this was that they felt that their lives lacked safety and that there was nothing that could be done to prevent being victimised again.

Frieze and Bookwala (in Zeidner & Edner, 1996) also included research conducted in 1983 by Scheppele and Bart, which indicate that such victims may no longer see the world as a safe place, and therefore live with an increased awareness of their own mortality. In addition, the victims' basic belief that they live in a benevolent world is destroyed. It follows that even if they strive to live 'good' lives, there is no guarantee that only 'good' things will happen to them. Although variances such as personality, dispositions, culture, socialisation and life contexts do exist amongst participants, it is hypothesised that repetitive trauma may have a similar impact on the victims' thinking processes, despite these differences.

- **The nature of the crime and participants' coping abilities**

The contexts of the armed robberies sustained by the participants in the current study, are both repetitive and multiple in nature. Eagle (in Friedland, 1999) clarifies this type of victimisation by stating that repetitive trauma suggests being victimised by the same



stressor at different times, while multiple traumas indicate that the traumatic stressor is an ongoing threat within the environment. Victims are often compelled to return to the workplace on a daily basis to resume their occupational duties. This place of employ is also the location where the traumatic episode transpired. In order to cope and manage the effects of the traumatic event, victims of crime often experience a need to avoid or vacate the place where the trauma occurred. Peltzer (2000) conducted research on crime victims and found that approximately one third of the participants reported that they had resigned from their workplace, or vacated the premises where the original trauma took place. In the current study, however, all the participants reported having had no alternative but to return and continue working in the same place of employ, despite having been traumatised in that same location (often more than twice).

The researcher was interested in whether, or how, victims were coping given the repetitive and multiple nature of the crimes. If a once-off traumatic event due to violent crime has the potential to lead to severe psychological distress, what then is the effect and impact of repetitive armed robbery attacks in the same location, on the overall functioning of the victim?

Through input from the community, the researcher became aware that while repetitively victimised retail business owners might be observed as functioning effectively, this may be a type of unconscious or conscious display of pseudo coping. Stansfeld (2002), who conducted research on South African victims of crime, also includes the idea that victims seem to be coping on a superficial level. It would then appear that sufferers of such trauma often put on a brave face and continue in their daily lives as if they have been totally unaffected. However, after conducting interviews and psychometric tests on the 15 participants in the current study, a different picture emerged. While these participants

readily acknowledge the severity of the impact of the repetitive armed robberies on their lives, they then tend to contradict this idea. The contradiction is in the participants' affirmations that they are functioning and coping in basically the same way as they did prior to the robberies, as well as that they have no need to talk about the events.

However, community interactions with family members of the victims, indicate that these verbalisations are not always accurate. Family members report witnessing a change in behaviour which include intense and erratic emotional displays, changes in disposition, mood swings, and 'out-of-character' behaviours. Additional behaviours included nervousness, paranoia, hypervigilance, high levels of anxiety, stress, sleep disturbances, displays of unreasonable thinking, resistance to obtaining professional intervention, and fears of repeat attacks. Furthermore, during the administration of the Rorschach the majority of the participants tended to deviate from the content of the responses, in order to provide some details or furnish information regarding the events of the robberies.

Fears of repeat victimisations often result from the victim's awareness that as retail businesses, they are soft targets for criminals. Stewart and Davis (2003) elaborate on this, stating that supermarkets, bars and restaurants are often cash businesses, making them prime targets for robberies. Fears and anxieties of being 'easy prey' for criminal activities may also be exacerbated by perceptions of being unprotected by the justice system.

According to Van Dijk (in Peltzer, 2000), the majority of persons victimised by crime in South Africa are of the opinion that the services provided by the SAPS are inadequate.

Van Dijk considers this to be one of the fundamental contributory factors in the underreporting of crime in South Africa. Fear can be a debilitating emotion and when this feeling becomes a part of an individual's daily experience, the psyche can become 'overloaded'. Elias (1986) supports this notion:

Victimisation can produce psychological repercussions that enhance our fear and sense of vulnerability, alter our attitudes about our environment and transform our behaviour. Violent victimisation assaults our egos as well as our bodies, producing a sense of defilement and lost confidence (p. 116).

- **Limited research and literature on the subject**

A third motivating factor prompting this research study was the apparently limited literature and research on the effect of repetitive and multiple armed robbery in South Africa. As highlighted by Glanz (1994), Stansfeld (2001), and Van Niekerk (2002), there is insufficient literature available to indicate the extent and effects of violence and crime in South Africa. Still, research on victims of crime and trauma is necessary to understand the impact of such negative experiences on participants. Therefore, a descriptive analysis of a specific type of repetitive trauma in adulthood may serve to contribute more to the existing understanding of the effects of victimisation and trauma.

### **1.5 Trauma and using the Rorschach as the research method**

The Rorschach Inkblot Method (RIM) is a cognitive perceptual assessment tool that is often employed in psychological assessments. As noted by Herman Rorschach, this psychometric assessment device is not a diagnostic tool (Exner, 1993). Rather, the RIM is a test that is conceptualised as eliciting responses that denote a particular and relatively permanent psychological aspect of an individual. In other words, the participant's responses provide insight into how decisions are made and problems are solved, as well as how events are perceived and conceptualised. In addition, it offers information in respect of how participants are likely to behave and manage stress, as well as the view held of the self and

others (Weiner, 2001). Furthermore, a participant's test responses can vary, depending on the current conditions prevailing in the person's life. "For instance, unusual or prolonged stress conditions might elicit a transient alteration in the style, whereas some treatment effect might create a more permanent change" (Exner, 1993, p. 2).

As stated by Levin and Reis (in Wilson & Keane, 1997), the RIM has been used as a measure of assessing traumatised participants and has resulted in over 20 published studies.

According to these authors, the Rorschach is a test instrument that is considered to have both "ideographic and nomothetic strengths" (p. 530). Together with this, they state that the benefit of using the RIM rather than other assessment measures, is that it has the potential to yield information that is not always accessible "by self-report measures" (p.531).

In an article on the Rorschach and trauma, Cerney (1990) refers to Kowitz's discussion on Rorschach symbol formation wherein he stated that trauma is not an isolated event. Instead, the trauma becomes incorporated into the (conscious and unconscious) dilemmas and fantasies dominating at that time of the person's personality.

Research studies on repetitive armed robbery victims using the RIM as the main assessment tool, do not appear to have been conducted previously. Applying Exner's Comprehensive System (CS) method of administering, analysing and interpreting in Rorschach research studies on trauma victims, has also been limited. This fact is highlighted by Levin and Reis (in Wilson & Keane, 1997) who state that different methods for analysing and interpreting the Rorschach test data have been applied when investigating traumatised participants. The latter researchers are of the opinion that this creates a lack of uniformity in terms of the data accumulated in such research studies. Therefore, they recommend that more RIM studies on trauma victims should use the CS method. This would serve to provide a more uniform and standardised research base.

- **The perceptual thinking processes of the participants**

In the current study, the intention is to describe the sample group in terms of their perceptions and thinking processes as well as their capacity for control and stress tolerance. It is thought that in an attempt to cope with the repeated and multiple traumas, as well as to unconsciously defend against the accompanying anxiety, the participants' thinking and perceptions of reality may become distorted or present as atypical.

The researcher's decision to conduct a descriptive study on this type of repetitive trauma using the RIM, was also influenced by the accuracy of the cognitive triad. In this regard, Beutler and Berren (1995) attest to this and state that as a test instrument, "cognitive and ideational processes are tapped quite extensively by the Rorschach" (p. 199). The so-called cognitive triad comprises the ideation, mediation and processing features of the participants.

The cognitive triad clusters of the Rorschach test serve to assess the manner in which a participant approaches the task of taking in information or stimuli from the environment (processing), translating such information into meaningful responses (mediation) and the thinking processes involved in these activities (ideation) (Exner, 1993).

In previous independent Rorschach research conducted by Levine and Reis (in Wilson & Keane, 1997) on various types of trauma victims, the findings reveal that participants presented with atypical reality testing. Specifically, they indicated impaired or unconventional perceptions of reality and severe, often bizarre, perceptual distortions. Swanson, Blount and Bruno (in Allen, 1994) conducted RIM research on fifty participants diagnosed with PTSD and found that they presented with impaired reality testing. Significant levels of impaired reality testing were also found by Hartman, Clark,

Morgan et al. (in Allen, 1994) after using the RIM to evaluate a sample of 41 veterans diagnosed with PTSD. Holaday's (2000) RIM research on traumatised children and adolescents yielded results similar to that of adult studies, with perception of reality significantly impaired.

According to Exner (1993), the RIM is a complex psychometric test which engages the participant in a number of perceptual and cognitive operations, while also "laying open the psychological door for projection"(p. 53). Hurt, Reznikoff and Clarkin (in Beutler & Berren, 1995), offer an explanation to clarify the term 'projection'. They state that when participants are presented with data that is fairly ambiguous or unstructured, they will formulate and interpret such information according to their own unique perceptions, belief systems and worldviews held. Thereafter, participants will "project aspects of their inner lives and modes of thinking" into the responses (p. 187).

Research using the RIM to investigate this particular type of trauma does not appear to have been conducted previously, and would thus serve to not only increase the research database of Rorschach studies, but also to contribute towards an improved understanding of victims of repetitive and multiple trauma.

## **1.6 Research hypothesis**

The researcher's hypothesis is that that when participants are repetitively traumatised due to crime in the workplace and have to return to this place of employ daily, the victims process their reality and perceive their world in an atypical manner due to the ongoing threat of repeat victimisation.

## **1.7 Participant selection criteria**

Individual participation was limited to victims of armed robbery who met with the following criteria:

- Adult, male proprietors/employees of retail businesses;
- Who have been repetitively traumatised (more than once), in the same manner, in the same location; and
- Who have to return to the scene of the trauma (the workplace), on a daily basis.

### **1.8 The research participants**

The sample group included only those participants who fit the selection criteria. Despite the fact that it is possible that these participants could meet the criteria for a diagnosis of PTSD, at the time of this research, none of the participants had been assessed, diagnosed or treated for this DSM-IV-TR disorder. The repeatedly victimised participants are all currently and permanently residing in the Gauteng province of South Africa.

All of the participants are part of the small business sector of the population, and are either managers or proprietors of businesses in counter-trade or retail sectors of the market. All of the participants are of foreign descent. The relevance of gender and culture, in gaining more understanding of trauma victims, is expanded upon in Chapter 2.

### **1.9 Research objectives**

The research objective is aimed at conducting a simple descriptive study of a sample of participants who have been repetitively (more than once) subjected to armed robberies in the workplace. The RIM variables that form the main focus of this research are the D and Adjusted D Scores, as well as those within the Perceptual Thinking Index (PTI). As indicated by Exner (1995), using the RIM for this proposed type of descriptive study is not aimed at depicting differences between these participants and others, but rather to provide insight into whether common features exist amongst participants. “The importance of the report is not to demonstrate that these participants differ from other participants, but simply

to offer some information concerning their relatively homogeneous features” (Exner, 1995, p. 17).

Thus the study’s objectives are to describe the 15 participants in terms of their perceptual thinking processes, as well as their coping capacities and to assess whether any similarities exist between them. In addition, the sample group’s perceptions of reality also form part of the descriptive study. As indicated by Shalev et al. (2000), victims of multiple armed robberies may become so overwhelmed with stress and anxiety that their perception and thought processes take on an atypical or abnormal presentation, not unlike those seen in psychotic participants. Evaluating each of the participant’s PTI scores together with the cognitive triad in the Rorschach test make these descriptions possible.

Additionally, the research aims include describing each participants’ current capacity to control and manage stress, as well as their general tolerance capacity. The latter refers to the participants’ more enduring characteristic trait of controls and stress tolerance. This information is obtained by assessing the D and the Adjusted D Scores of each participant. A more in-depth explanation of these indices follows in Chapter 4 of this study.

Research on trauma populations has contributed significantly to increased understanding and knowledge in the field of traumatic stress. Any additional information regarding the effects of various traumatic experiences serves to increase the existing knowledge base. Thus it is hoped that the current study will add to this overall body of knowledge.

#### **1.10 Research method**

A quantitative approach was adopted for this research and the CS method used to administer and to analyse, as well as interpret the RIM data. Part of this study’s research aim is to describe the perceptual thinking processes of participants. The RIM is considered to be a suitable and efficient instrument in facilitating a description of participants’



perceptual thinking processes. As already mentioned, Beutler and Berren (1995) highlight the efficacy of the Rorschach in terms of its ability to tap cognitive and perceptual processes. Levin and Reis (in Wilson & Keane, 1997) emphasise the value of using the CS due to its “statistical robustness, normative databases, standardised administration and scoring, and psychometric reliability and validity” (p.537). The research methodology is described in detail in Chapters three and four of this study.

### **1.11 Key constructs defined**

- **Repetitive armed robbery in the workplace**

For the purposes of this study, the term ‘repetitive’ trauma refers to two or more incidences of the same type of trauma (armed robbery) that occurred at the same location (workplace), to the same victim (retail employer or employee) at different times. In addition, the term ‘multiple’ means that the threat of further victimisation within the environment is strongly evident and ongoing.

- **Robbery**

The Australian Bureau of Statistics (Mouzos & Carcach, 2001) explains the meaning of robbery as referring to an illegal act of taking another’s belongings, without permission, by means of force, intimidation, violence or fear -inducing, and life-threatening tactics, in a confrontational manner. A working definition of armed robbery within the context of this research is that the perpetrator’s motive was theft and that weapons were used to effect the act, coupled with the use of physically aggressive behaviour. In delineating aggressive behaviour, Bandura (in Harvey, 2002) describes it as the social consensus of conduct which are intended to hurt or destroy another, “some of which reside in the evaluator rather than in the performer” (p. 180).

- **Weapons**

Mouzos and Carchach (2001) categorise weapons into three broad groups, namely: firearms, other weapons, and weapons not otherwise specified. Firearms are described as “any potentially lethal, barreled weapon, from which any shot, bullet or other missile is able, or appears able to be discharged” (p. 20). Other weapons refer to “any instrument or substance, other than a firearm” (p. 20) which has the capacity to result in serious injury, damage or loss of life. Instruments which cannot be identified and which are used in the commissioning of a crime fall into the third category, known as ‘unspecified weapons’.

In this study, all of the 15 participants reported that the perpetrators used weapons (revolvers and knives) in every one of the robberies experienced in the workplace. Weapon usage is generally aimed at either intimidating or coercing the victims, or to willfully and intentionally inflict physical harm on the victim. In previous research conducted by Harding and Blake (in Mouzos & Carcach, 2001), armed robbers provided various reasons as to their choice of firearm usage in effecting successful hold-ups. The reasons included the fact that weapons facilitate co-operation, reduce resistance, and ensure victim control, as well as potentially controlling large numbers of people simultaneously.

The research findings of Macdonald (in Mouzos & Carcach, 2001) indicate that the ability to intimidate the victim goes hand-in-hand with armed robberies. While he found that perpetrators were not always aware of all of their motives behind their use of force, they are often resentful and envious of the victims. Weapons facilitate the chance for robbers to act out their negative feelings and sadistic thoughts, as well as disempower, humiliate, harm or terminate the lives of their victims.

- **Workplace**

An individual's workplace is understood to be the place attended daily to perform certain duties, with the aim of receiving remuneration. Hornby (1998) defines workplace as, "the place where people work, e.g. an office or a factory" (p. 1377).

Focus on the 'workplace' is significant, as participants are traumatised in this setting, and must then return to the scene of the trauma on a daily basis. Once such attacks occur repetitively, the idea of another robbery becomes almost part of daily reality.

Traumatised persons often continue with their lives with a reality that embraces a constant 'on alert' mode of functioning, which can result in Hypervigilant behaviour.

The impact of such stress on the participants' overall physiological and psychological functioning thus becomes extensive. In exploring the neurobiological dissociative states of participants, Shalev, et al. (2000) concluded that when stress levels reach disproportionate levels, the individual could experience delusions and hallucinations.

Their perceptions become severely distorted and, in the case of trauma that occurs in adulthood, one may see conversion reactions, dissociative states, fugues and

depersonalisation. Although the current study does not explore these latter defensive

states, it remains important to mention it. These defensive states are significant in that

they form additional aspects of trauma symptomology that warrant further research

investigation. In describing conversion reaction, Bradshaw (1988) states that when

primary affective states exceed an individual's capacity to cope and are experienced as

overwhelming, these emotions are unconsciously changed or converted into alternative,

safer thoughts and feeling states. Depersonalisation is explained as a defence mechanism

wherein the victim no longer experiences himself as a subjective self, but rather as an

object, which leads to the awareness of the inner experience of the event being lost. He

describes dissociation as an unconscious process, which is often engaged in when an individual is severely traumatised or physically violated. When an individual experiences an event as exceeding his or her available coping repertoire, there may be a tendency to disconnect from the event. It is also possible to mentally dissociate from traumatic events in order to cope with the emotive and cognitive states which the participant experiences as exceeding the ability to cope. The defensive states that are generally used to shut out the excessive affect that leaves the individual feeling out of control or living in unreality, are denial and regression.

#### **1.12 Scientific contributions of the research study**

The current study serves to provide research in terms of one aspect of crime as well as on the effects on its victims, within a specific context. As already stated, the available research and literature indicating the extent and effects of crime and violence in South Africa are extremely limited (Glanz, 1994; Stansfeld, 2001; Van Niekerk, 2002). In addition, studies that investigate how being repetitively held up within the workplace and still having to return there daily impacts a victim, are even more limited. Therefore, the information gleaned from such a study would provide interesting information within the field of trauma studies. Frieze and Bookwala (in Zeidner & Endler, 1996) recommend that more research, which focuses on the impact of specific types of crimes on victims, be conducted. They also state that there is need to investigate different types of crime traumas separately, and drawing on the theoretical developments already made, determine the differences between the effects of varying crimes on the victims. A descriptive Rorschach study on whether participants present with distorted perceptual functioning and atypical reality testing, also has a significant contribution to make. It suggests the possibility that symptoms of trauma include perceptual distortions and impaired reality testing, as found by other researchers (Hartman in Wilson & Keane, 1997; Swanson, Blount & Bruno, in Allen, 1994; Goldfinger

et al., 1998; Holaday, 2000; Alao et al., 2003). This information serves to expand upon the existing literature regarding the impact and symptoms of trauma. It is also possible that it will generate additional interest in future trauma research.

## CHAPTER TWO

### A GENERAL OVERVIEW OF TRAUMA

#### 2.1 An introduction

In opening this chapter it is important to elaborate on what is meant by both the word 'trauma', as well as its effects, before continuing with more in-depth discussions.

In essence, trauma can be viewed as the effect that ensues after an injury. Such injury may be a physiological or a psychological injury. The effects of traumatic episodes or psychological injuries may lead to the events being 'over-remembered' and included as present experiences (Russel in Teicholtz & Kriegman, 1999). Alternatively, if too painful, an individual can defend against the overwhelming feelings by repressing the memories from consciousness. "Shrouded in ambiguity or concealed in the depths of the unconscious, their effects seep through in self-destructive behaviour" (Cerney, 1990, p. 782). In response to the question 'what is trauma?' Matsakis (1998) states that it involves three main elements. These elements comprise "being afraid, feeling overwhelmed and being or feeling helpless" (p. 338). He continues to describe victims of trauma as individuals who have at some point in their lives, experienced an event as life-threatening as well as felt helpless, trapped and powerless to escape.

Humans are responsive beings that react to traumatic events in different ways. The reasons for the different reactions vary. One important factor highlighted by Van der Kolk (1996) is that a new traumatic event can activate the memories of a past traumatic incident, and thus lead to a type of 'domino' effect. Another factor is the extent of the trauma. As indicated by Janoff-Bullman (1992), traumas differ in terms of severity and thus result in non-identical reactions amongst victims. However, even considerably different traumatisations may result in similar psychological effects. Whether similar or dissimilar, all reactions subsequent to

trauma serve to contribute towards the clinician's or researcher's understanding of the impact upon the victim's thoughts and behaviours. These discrepancies and commonalities serve to shed more light on existing understanding in terms of the "survivor's experience" and "the psychology of daily existence" (Janoff-Bullman, 1992, p. 4).

The experience of, and reaction to the same type of trauma may also vary amongst participants. There are several reasons for such variances, one of which involves the unique differences in characteristics amongst individuals. An additional reason for different reactions to the same trauma relates to the influences of socio-environmental factors. Another reason, according to Summerfield (in Kleber, Figley & Gersons, 1995), is that victims' responses are influenced by the meaning attributed to the traumatic events. Meaning attributions are largely influenced by each individual's unique worldview, culture, politics, and society, which serves to explain the vast variances in survivors' experiences of traumatic events.

Literature on the complexities involved when studying trauma suggests that when researching this phenomenon, more cognisance should be taken of its multi-dimensionality (Shalev et al. 2000). These authors are of the opinion that such complexities are not always recognised by those conducting investigative studies on trauma. In other words, there are a significant number of interrelated and interconnected features associated with trauma, which need consideration and inclusion. Young, Argenti-pillen, Witzen and Kotler, as well as Black and Newman (in Shalev et al., 2000), provide a more in-depth understanding of the multidimensionality of the individual by discussing various important features which require consideration and inclusion. These include basic individual differences in terms of personality and characteristic traits, factors such as the individual's history, culture, gender, race, socio-economic status, as well as environmental and geographical locations. In

addition, aspects such as whether the trauma is natural, man-made, domestic, acute, chronic, results from primary or secondary victimization, or occurs in childhood or adulthood, are pertinent to a comprehensive understanding.

Comprehension of the term 'trauma' appears to find no respite in terms of additional inclusions and revisions in contemporary society (Wilson in Friedland, 1999). These inclusions refer to the different types of trauma, the symptoms of trauma, the impact on victims, as well as different contexts such as the recent tsunami and past World Trade centre disasters. These inclusions and revisions create a space for new meanings, as well as different perceptions and reality attributions when victims are confronted with fear, disruption, powerlessness, dread, and sometimes even the possibility of a premature death.

It is this researcher's view that, as new societal complexities and scientific inventions develop in an ever-changing modern world, the inevitable progression will be that new types of trauma will accompany them. These new challenges may suggest the need for additional and possibly different approaches in terms of our current understanding of trauma. As current research contributes to increased understanding and knowledge regarding what constitutes various types of traumatic experiences, new ways of thinking may emerge.

## **2.2 Distinguishing between stress, crises and trauma contexts**

Stress, crises, and trauma are often mistakenly referred to as pertaining to one and the same phenomenon. It is therefore important to clarify them separately, in order to reduce semantic noise. In making a distinction between stress, crises, and trauma contexts, Lewis (1999) emphasises the distinct differences between them. According to him, trauma is viewed as an experience which occurs suddenly, without warning, and which may evoke horror or other intense negative emotions within the victim. In the event of trauma, the person's belief is that there is significant threat of harm to the self, or even the threat of



death, with accompanying feelings of loss of control and helplessness. Sykes (1982) describes trauma as entailing “a morbid condition of body produced by wound or external violence or emotional shock” (p. 1140), and Hornby (1988) concurs that trauma is a type of shock which impacts one affectively and psychologically. This shock has the potential to result in long-term, detrimental or impairing effects. Furthermore, it may leave behind an imprint in the victim’s experiential memories, which can lead to short-term or ongoing distress and anxiety.

A crisis (Hornby, 1998) pertains more to a period of time in an individual’s life that may pose great danger, difficulties, or ill health.

Kruger, Smit and Leroux (in Pillay & Claase-Schutte, 2004) state that stress can be understood as an outside influence which exerts pressure on an object. More specifically, "stress is the unspecified response of the human body, to these demands. The stressor is the external force that the person observes, while the body’s reaction to it is called stress” (p. 123).

Expanding upon the understanding of psychological stress, Van der Kolk et al. (1996) use the term, ‘traumatic stress’. Traumatic stress encompasses two important components, namely the stressful affect associated with the negative event, and the mental traumatisation, which then triggers a cycle of ongoing stressful feelings.

### **2.3 An introduction to the literature review**

As the field of trauma studies is an expansive field that cannot be fully explored within the confines of this study, the principal aim of this chapter is to focus on only one facet of the broad topic of trauma. This focus entails an elaboration of the theoretical underpinnings of the impact, reactions, responses or effects of a specific type of trauma (repetitive and multiple armed robbery in the workplace) which then results in different types of symptom

manifestation. A review of past and present knowledge and understanding in terms of what is known about the impact of traumatic episodes upon victims, is provided. Moving from a wide view of the responses and reactions of trauma victims in general, the discussion then becomes more focused on the effects of armed robbery victimisation within the workplace.

As a broad term, 'trauma' is a subject that is as diverse as it is complex, in its multi-faceted context. If one is to accept Figley's (in Wilson & Keane, 1997) statement that literature on trauma now occupies whole rooms, rather than mere space on bookshelves, then one can begin to appreciate the enormity of the subject as a whole.

Types of traumatic experiences are varied and include war; combat stress and torture; crime; natural disasters; terrorism and hostage contexts; physical and emotional abuse or assault; domestic violence; sexual violence, intimidation or rape; robbery; HIV; various types of loss such as death or divorce; homicide and suicide; accidents; bombings; rape; chemical warfare; media-promoted, vicarious traumatisation; family murders; incest; and political unrest (Shalev et al., 2000). Irrespective of the type of trauma sustained, several pertinent factors require consideration if a comprehensive understanding of the effects of trauma is sought. These factors include the nature of the event; the victim's perceptions, culture, socio-political contexts, gender, race and age; primary or secondary (vicarious) traumatisation; meaning attribution; personality style; previous exposure to trauma; the nature of the supportive structures available to the victim; as well as the victim's general coping style and available internal coping resources at the time of the event (Zeidner & Endler, 1996).

When investigating major life stressors (such as trauma), the environment in which such events take place is equally relevant. Lepore and Evans (in Zeidner & Endler, 1996) indicate

that in order to effectively assess the effects of major life stressors upon victims, one cannot divorce the events from the ecological systems in which they occur.

### **2.3.1 A working definition of trauma**

The working definition used in the current study will subsume various viewpoints from different sources. For the purpose of this study, trauma is considered to be a normal response to an abnormal and life-threatening event or circumstance (Shalev in Van der Kolk et al., 1996). It is an experience wherein the individual's coping resources to effectively cope or manage the demands of a situation are exceeded (Lewis, 1999). These demands may be physical, emotional, or psychological in nature and may all interact together. It is also an incident involving actual threat of harm to oneself or others, or where the context is life-threatening (Matsakis 1998).

It is clear from contemporary literature on trauma (Van der Kolk & et al., 1996; Scaer, 2001; Leys, 2002) that the working definition of trauma for this study needs to be more expansive. As stated in the early stages of this chapter, the range of traumatic experiences and stress, appears to change and become more diverse, in the same way that society and the modern world continue to change.

Definitions of trauma therefore provide a basic premise from which to work. Such definitions however, are unable to fully encompass the experiences of those that have suffered extensive trauma, or contain all the facets of its meanings. The definition of trauma, which includes the central idea of the survival of the self being threatened by external forces, is no more important than the meaning that the event has, on a person's life. The physical reality of the event and the impact that this has on the victim is as important as the meaning that the traumatised person attaches to the event.

### 2.3.2 Physiological versus psychological effects of trauma

The impact of a traumatic event results not only in a significant disturbance to the human organism's physiological equilibrium, but also "in the psychological equilibrium" of the victim (Janoff-Bullman, 1992, p. 69). Trauma as a general term, is therefore distinguished into two broad categories, namely physical and psychological trauma.

Experiences of physical trauma refer to serious bodily wounds or injuries, which may be incurred through acts of war, terrorism, natural disasters, automobile accidents, third degree burns and assaults or violent contexts. Kudler (in Shalev et al., 2000) refers to the history of psychological trauma as being a phenomenon that has evolved in a process of stages. Due to rapidly changing technology within modern society, the general population is increasingly exposed to trauma, both directly and indirectly.

Whereas in previous times, the absence of media coverage relinquished persons from being exposed to vicarious traumatising, the mass media of today ensures world-wide dissemination of information. The result is that individuals become secondary victims, despite being completely absent from the occurrence or being considerably distanced from the traumatic episode when it takes place. Thus not only are victims confronted with the trauma, but observers are also impacted by acts often previously unimaginable to the majority.

Psychological trauma may occur in conjunction with a physical injury or on its own due to a perceived threat to the integrity of the self. Janoff-Bullman (1992) states that the initial threat is perceived as one of physical harm to the self, which then results in intense fear and the additional threat to the integrity of the psychological domains of the self. Scaer (2001) reiterates this idea, emphasising the powerful interconnectedness between physical trauma and emotional trauma.

In psychological trauma, there is a complex interactive process between a number of

related factors. This interconnection occurs within the self between physiological responses, affective reactions and cognitions, leading to eventual psychological manifestations of the trauma. The actual experience and subsequent response also include an interaction between the time, setting, personal frame of reference, and nature of the trauma itself. The inclusiveness of the idea that trauma is a complex and multidimensional phenomenon is also highlighted by Hewitt and Flett (in Zeidner & Endler, 1996).

#### **2.4 The impact of trauma: review of past and present literature**

The study of trauma has over the years been characterised by periods of thorough investigation, as well as times of complete neglect (Herman in Friedland, 1999). In considering the historical progression of trauma as a phenomenon, Van der Kolk et al. (1996) state that contemporary scientific studies of this subject, commenced approximately twenty years ago. They emphasise the need to amalgamate what has previously been learnt about trauma, with that which is currently known, and to use this synthesised knowledge base as the foundation from which to work with future challenges.

Figley (in Harvey, 2002) provides a short account of the history of trauma. He refers to the works of Veith (in Harvey, 2002) who stated that one of the first medical texts on what has now come to be referred to as traumatology, was published in 1900 B.C. An ancient Egyptian physician detailed various hysterical responses of participants in a publication called 'Kunyus Paypyrus'. Traumatology, as defined by Figley, entails explorative studies and applications of information regarding stressful events. More specifically, it refers to both the short and long-term psychosocial outcomes of traumatic occurrences and all related aspects that influence those outcomes.

The field of trauma studies has been significantly influenced by the extensive investigative studies on Vietnam War veterans and the corresponding PTSD diagnoses. PTSD symptoms such as flashbacks, startle responses and dissociation have been manifested in individuals in every century, in some or other manner. However, these symptoms were interpreted during the earlier centuries as spiritual manifestations of either the gods, God or evil entities (Figley in Harvey, 2002). Figley provides information on some of the prominent earlier figures that contributed to studies on trauma that dates back to the work of J.M. Charcot in 1889.

Charcot was one of the first to explain the link between hysteria and psychological functioning. Another important individual referred to is the psychologist Pierre Janet, who was the first clinician to study and treat traumatic stress. According to Figley, Janet was not only the first psychologist to list the symptoms of trauma, which are now contained within the diagnostic criteria for PTSD, but was also the first clinician to identify one of the core issues in PTSD. This core issue refers to an individual's lack of ability to integrate traumatic memories. Survivors of traumatic events were viewed as becoming incapacitated by the occurrences and subsequently began to manifest nervous reactions. The same idea is underscored by Van der Kolk et al. (1996) who have investigated the subject of trauma quite extensively.

In 1882 Erichsen (Figley in Harvey, 2002) made connections between hysteria and the idea of 'concussion of the spine'. Celani (1994) expanded on this idea of spinal injury and its corresponding link to psychological trauma, which was prevalent in the 1880s. During these earlier times, different and unclear disorders began to manifest amongst survivors of railroad collisions, and on the assumption that the spine had sustained injuries from these accidents, the disorders were referred to as 'railway spine'. Eventually they were understood as a type of hysteria which encompassed a range of symptoms, namely: "fainting spells, excessive fears, delirium, unexplained weakness, and nervous exhaustion" (p. 16).

As stated by Celani (1994), prominent figures during this phase of history were two railroad physicians Herman Oppenheim and Herbert Page. Page authored a book on spinal injuries in 1883, wherein he included 200 cases of what he described as psychologically-based hysterias. Oppenheim held contrary views, in that he rejected the idea of any spinal injuries having taken place at all. He termed the phenomena 'traumatic neurosis' to describe victims who claimed spinal injuries when no physiological evidence could be found.

According to Leys (2000), trauma as a psychological term, gained more and more momentum, not only due to the influential figures of Charcot, Janet and Alfred Binet, but also as a result of the work of Morton Prince, Josef Breuer and Sigmund Freud. Emotional shock which occurred without warning led to what these influential theorists referred to as mental wounding. The result was a "shattering of the personality" (p. 4) due to overwhelming fear, as well as psychic trauma.

Understanding of the term trauma evolved progressively during World War I. During this time soldiers displayed clear traumatic symptoms which were referred to as 'shell shock' and 'war neurosis'. In continuing with her account of the historical progression of trauma, Leys (2000) states that after World War II, despite the evidence of "combat fatigue, concentration camp syndrome or survivor syndrome" (p. 5), interest in the field of trauma waned significantly. The acknowledgement of PTSD as a recognised disorder in 1980 was largely due to the unrelenting efforts and "political struggles by psychiatrists, social workers, activists and others" (Leys 2000, p. 5). This 'political struggle' involved difficulty in arriving at a clear understanding of the trauma that the Vietnamese war veterans had sustained.

Symptoms that these war veterans displayed (Kleber et al., 1995) included anger and resentment towards authority figures, social withdrawal, feeling separate and disconnected from others, as well as experiencing problems in their intimate relationships.

The above then serves as a short account of some of the earlier historical progressions of trauma as a phenomenon. Van der Kolk et al. (1996) highlight the benefit in comparing the old notions of neurosis with current understandings of the symptoms of trauma. Neurosis, as defined by Reber (1985), refers to a specific group of symptoms which, although they may incur feelings of pain and distress, are “relatively benign, in that reality testing is intact and by and large social norms are adhered to” (p. 471). This understanding of neurosis may differ somewhat when compared to contemporary investigations, which have found that trauma can result in psychotic-like symptoms (Hartman in Wilson & Keane, 1997; Swanson, Blount & Bruno in Allen, 1994; Holaday, 2000; Alao, Leso, Dewan & Johnson, 2003). The psychotic-like symptom presentation includes impaired reality testing or viewing reality in an atypical manner. This accords with Van der Kolk et al. (1996) who describe neurosis as involving the presentation of neurotic symptoms that result from the victim’s inability to integrate the experience. In other words, the trauma overwhelms the victim’s coping resources, which in turn results in the necessity to process reality in an atypical or maladaptive manner.

## **2.5 Theoretical views on trauma: Psychiatric and psychological perspectives**

Clinical schools of thought regarding the etiology, symptomology and treatment of trauma can be viewed from either a psychiatric or psychological perspective, or in conjunction with both. Each psychological school of thought has a particular understanding of the effects of trauma, as it accords with its specific paradigm. These theoretical views include, amongst others, psychoanalytical, cognitive, behavioural, humanistic-existential and systemic schools of thought.

### **2.5.1 Psychological views**

Psychiatry has made significant contributions in the field of trauma and stress-related disorders. This includes the categorising of specific symptom criteria



contained within the diagnosis of PTSD. While etiology and psychiatric categorisations of trauma serve a valuable purpose, the aims within the field of psychology are to yield insight and understanding in terms of how personality, behaviour, affect, cognitions, perceptions, and overall functioning is impacted when individuals suffer trauma.

Psychological studies are also interested in investigating how meaning attribution influences the manner in which a trauma will impact or affect an individual. Each individual's concept of reality is largely influenced by the meaning attributions held before and subsequent to a traumatic event. Scaer (2001) underscores the importance of acknowledging each individual's personal meaning attribution and its interaction with a life-threatening event, in order to fully comprehend its impact. Each victim inevitably attempts to reconcile the trauma and make personal sense of the event. In other words, each individual processes external stimuli and incoming information, holds a unique mental perception of the occurrence, and then cognitively mediates the trauma in order to form thought processes regarding the event. A traumatic event would then hold a specific 'meaning' for each individual personality. "Generating these meanings is an activity that is socially, culturally, and often politically framed" (Scaer, p. 20).

### **2.5.2 Psychological models of trauma**

Van der Kolk et al. (1996) provide a description of one of the psychological models, namely psychoanalysis, and how this school of thought regards nervous disorders. One basic tenet of this theory holds that it entails the pathological use of defence mechanisms which serve to defend against "unacceptable unconscious wishes and impulses"(p. 7). The trauma victim then begins to engage in the pathological use of defence mechanisms, which leads to behaviours and interactions which are not conducive to adaptive daily functioning. In addition, the trauma victim displays

reactions and responses which appear to suggest that the victim is reliving the past. There are, however, a number of comprehensive psychological theories and models which provide different perspectives in terms of understanding the impact of trauma. These models include the psychodynamic, behavioural, systemic, cognitive-behavioural, humanistic and existential, person-centred, and various other approaches. Each theoretical school of thought holds value and merit, but for the current study, attention will be directed at only one of the psychological schools of thought. This perspective is the cognitive-behavioural approach and is considered appropriate to the context of the study, namely the cognitive, perceptual processes of victims.

#### **2.5.2.1 Cognitive-behavioural models**

In attempting to explain the impact of trauma, Creamer (in Kleber et al., 1995) expands upon the increasing contemporary interest in the cognitive processing theories. Within this model various theories prevail, but in essence this school of thought suggests that before experiencing an event, each individual holds their own mental schemata, memory networks or representations of life and the world, wherein he or she exists.

Specific data is contained within this schemata, such as basic assumptions, past experiences, future expectations, and current meaning attribution Hollon & Kriss (in Kleber et al., 1995). These assumptions, life meanings and expectations, are in turn influenced by their cultural contexts and belief systems. Horowitz (in Kleber et al., 1995) states that when subjected to a life-threatening or critical event, the person becomes confronted with information that conflicts with his or her existing worldviews. Effective negotiation of this crisis requires the individual to cognitively work through the experience. This is imperative in order to bring this new data in line with

the previously held inner views. The existing data may also be modified, to facilitate congruence between the new information and the old views held.

Integration of the new information places additional stress on the victim. However, irrespective of this, it is important that the victim assimilate this information within the existing mental schemata. If congruence between old and new information is not facilitated, the traumatic experience will be retained in an active mode within the memory, resulting in continued, invasive and emotionally-charged memories (Horowitz in Kleber et al., 1995). A psychological and physiological numbing effect (symptomology of PTSD) then manifests, serving as a mechanism to ward off the intrusive recollections.

#### **2.5.2.2 Trauma contexts and meaning attribution**

To return to the previously mentioned views of Hollon and Kriss (in Kleber et al., 1995) who state that cognitive schemata comprises, amongst other things, of basic individual assumptions and meaning attributions, the issue of contexts becomes an important consideration. The relevance of contexts is an important inclusion in terms of understanding human psychological functioning and reactions, subsequent to traumatic events. Psychological research studies have contributed towards acknowledging the importance of viewing trauma from within a context that encompasses a multidimensional, interdisciplinary, and integrative framework” (Kleber et al., 1995 p. viii).

The interrelated and interconnectedness of various contexts can also be explained from a Systems theory perspective. To illustrate, the victim of crime is an individual who influences and is influenced by other contextual systems. Such systems include the individual, familial, community, socio-

economic, political, religious, and environmental. These systems also influence, and are in turn influenced by the ecosystem in which they exist. To explain this further, Kleber et al. (1995) refer to the context of the individual as being a personality structure that engages in a dynamic interplay between intra- and interpersonal patterns of communication. This structure develops within, and as a result of, the contexts referred to above. These contexts all interconnect on various levels and influence a person's interpretation of incoming stimuli, as well as outgoing information. An individual confronted with a life-threatening event is, therefore, not only impacted by the actual occurrence (the context of the event itself), but is also impacted by, and in turn impacts, all other systems that interact with the victim subsequent to the trauma. The individual's personal perception and interpretation of the event is thus formulated on many more factors than simply the event itself.

### **2.5.2.3 The reality or perceptions of the victim**

It is important to consider the fact that each participant's view of a traumatic event is unique to that individual. The perceptions of a victim of trauma are influenced by the life contexts, personal meaning attributions and worldviews, held by the individual. In discussing the perceptions of trauma victims, after contemplation and weighing them up against the experiences \ of others.

According to Quinney (in Roberts, 1979, p. 26), "A victim is a conception of reality, as well as an object of events." Persons who are involved in a number of sequential events all form their own conceptions of the reality of the situation, as they personally perceive it.

#### 2.5.2.4 Meaning attribution

Traumatic events are ascribed different meanings by each individual, thus allowing for the possibility of a variety of understandings and interpretations of criminal events. Firstly there is a socially constructed understanding of the term within the general population, and as emphasised by Steinberg (1999), each term or word has a denotative and connotative meaning. These associative meanings are accompanied by certain affective responses, which then influence the individual's perceptions and cognitive processing of trauma. These perceptions are also impacted by the events as they occur, which are experienced through individuals' personal lenses, private worldviews or frames of reference. According to Scaer (2001) both the physical aspect of and the meaning attributed to the trauma are of equal importance in the perceptions of victims.

The type of trauma or context of the traumatic event, together with the individual's particular coping resources, all contribute towards the manifestation of different responses amongst victims. The meaning attribution, as well as the coping reaction of a victim of a particular type of trauma, is closely interconnected to and influenced by the context of culture. An individual's culture plays a significant role in terms of the effects that a traumatic episode will have on a person (Shalev et al., 2000). According to these authors, earlier studies on trauma were approached from Westernised perspectives and beliefs. Summerfield (in Kleber et al., 1995) concurs that the long-term effects of acts which violate human integrity and identity have been studied extensively from Westernised views. These views, however, fail to take cognisance of the fact that non-westernised populations may differ in terms of their ideas of self in relation to others. Shalev et al. (2000) emphasise the need for current psychological

studies to adopt a more heightened awareness, and to take more cognisance of the impact of culture, ethnicity and different belief systems, in understanding the individual effects of trauma.

### **2.5.3 Psychiatric perspectives**

From the medical model, which emerged via psychiatry, an understanding developed of the physiological and biological effects of trauma. This led to the grouping of certain identifiable symptoms to form specific criteria which were contained within the disorder of Posttraumatic Stress. The recognition of PTSD as a clinical disorder was largely attributable to the work with the veterans of the Vietnam War (Van der Kolk et al., 1996).

Current ideas around the exposure to trauma, have resulted in PTSD receiving much attention. As stated by Eagle (2002), the clinical diagnosis of PTSD has been formulated according to the consensual reality prevailing at the time. Within both of the disciplines of Psychiatric and Psychological studies, anxiety, acute and chronic stress, as well as traumatic stress reactions amongst sufferers, have been extensively researched and evaluated. Current research continues to expand upon the existing knowledge base. The synthesis of previous and current research, symptom manifestation and theoretical assumptions, have all contributed to the present clinical pictures of stress, anxiety, PTSD, and other anxiety disorders, as categorised in the current DSM–IV-TR. With the psychiatric views emanating from a predominantly medical model of trauma, physiological and biological factors play a significant role in understanding trauma.

As an umbrella term, Anxiety Disorders encompass all mental health problems that are associated with debilitating, overwhelming and unmanageable levels of stress, fear, worry, apprehension, panic, phobias and trauma. This in turn results in the manifestation of illogical, inappropriate, often uncontrollable, and sometimes

significantly impaired patterns of interaction. Individuals express this anxious affect in three central ways, namely cognitively, behaviourally or somatically. Anxiety disorders may be acute or chronic and include phobias, obsessions, panic attacks, generalised anxiety, compulsions, PTSD and Acute Stress Disorder (Sadock & Sadock, 2003).

### 2.5.3.1 Clinical Features of PTSD

Sadock and Sadock (2003) describe the clinical features of PTSD as the “painful re-experiencing of the event, a pattern of avoidance and emotional numbing, and fairly constant hyperarousal”(p. 627). It may also be months, or even years subsequent to the event, before any symptoms manifest themselves. The authors state that after victims complete the mental status examination, they regularly present with feelings of guilt, humiliation and rejection. Additionally, “patients may also describe dissociative states and panic attacks and illusions and hallucinations may be present.” “Associative symptoms could include aggression, violence, poor impulse control as well as depression and substance-related disorders” (Sadock and Sadock, 2003, p. 627).

- **Simple versus Complex PTSD**

PTSD has in recent years been categorised into two broad types, namely Simple and Complex PTSD. In essence, Simple PTSD refers more to a once-off acute traumatic event. Complex PTSD, on the other hand, relates to trauma that is ongoing, repetitive and chronic in nature. Whealin, J.M. (2004) .*National Center for PTSD*. [On-line]. Available: [http://www.ncptsd.org/facts/specific/fs\\_complex\\_ptsd.html](http://www.ncptsd.org/facts/specific/fs_complex_ptsd.html). emphasises the need for more insight into discriminating between Complex versus Simple PTSD diagnoses. The author refers to

recommendations made in 1997 by Dr Judith Herman for the inclusion of an additional diagnosis of Complex PTSD. This addition is to provide for those participants who have sustained ongoing and long-term trauma. Disorders of extreme stress, (abbreviated as Desnos) are currently under consideration for inclusion in the DSM-IV-TR (Herman in Horowitz, 1999). Unlike Simple PTSD, which refers to a once-off event resulting in acute trauma to the victim, Complex PTSD is more chronic. The chronicity lies in the extended or long-term exposure to events that are traumatic to the participants. Prolonged types of trauma where victims are unable or feel unable escape include spousal and child abuse, incest, wars, imprisonment, cults, and exploitative organisations.

Herman (in Van Niekerk, 2002) describes Complex PTSD as resulting in complex symptomology such as somatisation, dissociation and presentation, that more than one diagnosis may be necessary. Van Niekerk (2002) conducted research on complex trauma and concluded that there is increasing support of the hypothesis that multiple and ongoing trauma has the potential to result in changes in personality structure. In addition, she states that such trauma can lead to symptom manifestation which includes psychotic features, somatic symptoms, dissociation, depression and anxiety related disorders.

According to Van der Kolk and McFarlane (in Van der Kolk et al., 1996), trauma-induced PTSD differs from other mental disorders, in that the main issue involved is one of each participant's subjective reality. The outcome of a trauma is significantly impacted by the victim's perceptions of reality.



In the literature (Janoff-Bulman, 1992; Van der Kolk et al., 1996), emphasis is given to the relevance of subjective reality. In other words, each victim will form a subjective perception of the reality of the trauma based on various influential factors. This subjective reality, together with how the individual makes sense of the event (attribution of meaning), are important inclusions when assessing the impact of trauma upon the victim. This is important if one is to gain a more comprehensive and wholistic perspective on the effects that trauma has on participants. In addition, it serves to promote more insight and understanding into the unique psychology of each individual.

PTSD may be limited in providing a comprehensive understanding of the effects of trauma and the literature appears to support this view (Whealin, 2004; Van der Kolk, 1996; Herman, 1998; Horowitz in Van Niekerk, 2002; Alao, Leso, Dewan & Johnson, 2003). It is the opinion of the above authors that in general, PTSD as a clinical disorder, does not fully encompass the full psychological impact on victims, of severe or chronic or repetitive trauma. In keeping with the afore-mentioned, Hudnall, Stamm and Friedman (in Shalev et al., 2000) suggest that the challenge to contemporary researchers is to create more equilibrium between current and more traditional understandings of trauma. In a comprehensive discussion on traumatic stress, Van der Kolk et al. (1996) highlight the debate around whether traumatic symptoms are diagnosed more appropriately within the dissociative, rather than the anxiety cluster of disorders. They conclude that the similarities and differences between these should be considered when reviewing traumatic stress, but they also indicate that there are significant variations in the pathology manifested within each cluster. In addition, critique has been directed at the current list of symptoms included

within the PTSD diagnostic criteria. The critique focuses on the absence of certain features in the DSM-IV-TR diagnosis, such as dissociation (Van der Kolk et al., 1996), somatisation (Hudnall et al. in Shalev et al., 2000), and psychosis (Hartman in Wilson & Keane, 1997; Swanson et al., in Allen, 1994; Alao et al., 2003; Holaday, 2000), which may present in sufferers of PTSD or victims of trauma. Self-regulation, discrimination, characterological development, and interpersonal relationship dysfunction are all symptoms which have been excluded from the PTSD criteria (Van der Kolk et al., 1996). According to these authors, these symptoms should be included in the overall assessment of trauma victims.

- **A medical or biological model of trauma**

In 1980, the American Psychiatric Association (in Van der Kolk, et al., 1996) explained PTSD as a condition resulting from abnormal events, which led to a normal stress reaction. In the event of a person being subjected to a traumatic episode, there is a distinct physiological reaction within the body.

To understand the impact of trauma from a biological point of view, Van der Kolk (in Horowitz, 1999) states that the event results in the release of various chemicals such as neurohormones, to effectively assist the body to cope with the stress. The central nervous system (Scaer, 2001) is therefore affected by the expulsion of these chemicals within the body and the brain. Cardiovascular and neuromuscular systems are activated in preparation to deal with this heightened alertness. This results in what is known as the 'flight, fight or freeze'

response. These physiological reactions, however, are in preparation of having to deal with such increased alertness and activation in the body as a short-term reaction. When the body becomes overloaded with persistent and ongoing stress, this chemical response can become ineffective and imbalanced, leading to maladaptive functioning of the human organism.

## **2.6 Adult versus childhood trauma**

The participants in the current study comprise 15 males who have been subject to repetitive trauma in adulthood. In respect of this group of participants, two important aspects of trauma are expanded upon in this section, namely trauma in adulthood and male socialisation. Both of these features have significant potential to influence the impact of a traumatic event. Therefore, by acquiring more insight into how these aspects of trauma influence outcomes, one is provided with a more wholistic and comprehensive understanding of the impact of trauma.

- **Childhood versus adult trauma**

It is important to make the distinction between trauma experienced in childhood with that sustained in adulthood. Boulanger (2002) attempts to clarify this distinction by stating that when a traumatic incident occurs in childhood, the child is unable to cope with the overwhelming terror and confusion, and thus defensively dissociates in order to prevent fragmentation. Parts of the self are split-off, which then becomes a set of self and object representations. This then enables the remaining self-parts to continue functioning in a less threatening reality. The traumatic memories are then generally acted upon without conscious awareness, as they reside predominantly in the unconscious and

are not always fully developed. In essence, the trauma becomes part of the personality structure.

Adult trauma, however, differs in that when the individual is traumatised, the dissociation does not involve such split-off parts in the already established personality. Instead, the trauma activates the threat of annihilation. This realisation of one's immortality and helplessness is lucid in conscious memory, and results in an altered sense of, or collapse of, the core self as it was formerly known.

- **Male socialisation and trauma**

As stated previously, one of the selection criteria for participation in the current research study, is that all participants had to be of the male gender. The researcher's idea, when contemplating the current study on male victims only, was not only to ensure a more homogeneous sample group, but also to address the issue of male socialisation. Masculine socialisation has, in the past, often inculcated and advocated biological or affective states, or both, that are in direct contrast to the reactive states generally experienced during and subsequent to traumatic events. To elaborate, the main symptoms of traumatic stress include feelings of fear, loss of control, helplessness, powerlessness, and extreme vulnerability (McFarlane in Kleber et al., 1995). Male socialisation often encourages the avoidance or denial of such affective states.

It must be emphasised that the researcher in no way considered the aspects of trauma from a sexist perspective. As indicated by Lisak (in Brooks & Good, 2001), masculine ideology is an important consideration in treating male victims of trauma. This ideology has evolved over thousands of years and has taken advantage of certain basic differences between the male and female genders. According to Lisak,

men are more predisposed to aggressive behaviour, and are physiologically larger in terms of muscle mass. The fostering of a masculine ideology through various socialisation practices, indoctrinations, and cultural beliefs, results in creating a specific culture amongst males. Within this culture any and all semblance of vulnerability, or signs of fear or powerlessness are rejected, denied, or avoided.

Lisek explains that this masculine ideology teaches men to suppress or ignore biological warnings, such as to flee from fear, express pain, or display distress or grief. Trauma often leads to biological states of overwhelming panic, fear and powerlessness. These affective states are, according to this ideology, to be obliterated. This places the male gender in a dilemma without resolution, wherein biological states and masculine ideology are at loggerheads with one another. In Lisek's view, the result is that male victims of trauma often merely suffer in silence. In addition, due to internal states of fear, distress, and vulnerability, which contravene the masculine ideology, males may often feel that they are frauds who have failed in making the grade for manhood. The outcome may often be that victimised males reject their essential biological or affective aspects, namely fears, vulnerability and powerlessness, which are vital parts of the self. They do this in order to ensure that they can lay claim to the statement "I am a man" (p. 270).

To retain this masculine sense of self, these victimised males may have to sacrifice parts of the self that make up their complete, optimal and functional humanness. "Emotionally and empathically crippled, they are unable to relate meaningfully to other humans" (p. 271). In understanding male victimisation, it is often necessary to view them as suffering from traumas which are twofold and interactive. To expand, male socialisation has often been traumatic in itself due to the imposition of such

masculine ideology, which severely limits the internal resources needed to live effective lives. This, coupled with traumatic victimisation, leaves them in a double bind.

This double bind is that, to fully acknowledge and experience the biological states subsequent to a trauma, they must reject the masculine ideology. However, if they reject this ideology, no longer denying their affective states, they may lose their sense of a male identity. This places the male victim of trauma in a no-win situation, which becomes further exacerbated when multiple and repetitive traumas occur. As indicated by Lisak, this has important implications for treatment approaches.

## **2.7 The phenomenon of criminal traumatisation**

The particular type of trauma being focused on within this descriptive study is that of repetitive and multiple victimisation due to crime. A more in-depth discussion on this type of trauma is thus warranted. Wilson and Keane (1997) list criminal victimisation as acts which include adult rape, physical assault, domestic violence, housebreaking, muggings and vehicle hijackings. In investigating the reactions of crime victims, Bard and Sangrey (in Janoff-Bullman, 1992) found that the threatening contact with criminals led to participants realising that their survival was uncertain.

According to Peltzer (2000) the detrimental effects of criminal traumatisation, are often both immediate and lifelong. The most common disorder resulting from such trauma is that of PTSD (Hansen, Killpatrick, Falsetti & Resnick in Peltzer, 2000). Criminal victimisation is coupled with additional complexities with which the victim must contend (Kleber & Brom in Peltzer, 2000). These complex additions include having to cope with contact with the media, police interrogation, medical professionals, security measures and insurance claims. Victims

thus often feel that they are victimised not only by criminal perpetrators, but also by the protective systems that are intended to support and assist them.

In discussing the literature on criminal victimisation, Frieze and Bookwala (in Zeidner & Endler, 1996) include the findings of various researchers (Figley, 1985; Frieze, Hymer, & Greenberg, 1987) who found that victims of different crimes responded in similar ways. Maguire (1980), Symonds (1976), and Veronen, Kilpatrick, and Resick (1979), (in Zeidner & Endler, 1996) list the immediate and short-term reactions to criminal traumatisation as denial, disbelief, and feeling disorientated or numb. Secondary reactions include psychosomatic symptoms, anxiety, and feeling incapacitated, as well as experiencing a wide range of other emotional reactions. Subsequent to researching crime victims, Greenberg, Ruback, and Westcott, (in Zeidner & Endler, 1996) found that such victimisation left participants feeling angry, depressed, fearful, humiliated and apprehensive regarding the future.

### **2.7.1 Crime in the workplace: Armed robberies**

According to Peltzer (2000) armed robberies are experienced traumatically by victims and inevitably lead to stressful reactions. In undertaking research on victims of armed hold-ups, Gabor, Kamphuis, and Emmelkamp (in Pillay & Claase-Schutte, 2004), found that six months subsequent to the trauma, these research participants were still experiencing psychological difficulties.

In their research on a sample of twenty retail store owners and employees who had been the victim of retail robberies in South Africa, Stewart and Davis (2003) included a number of perceptions and reactions, as reported by the participants. Some of the reported perceptions of these victims include previously held world assumptions and beliefs of invulnerability being shattered; life in general was now a

fear-based experience; generalised mistrust of all people; loss of quality of life; paranoia and hypervigilance; fear of repeat victimisation; feelings of helplessness, powerlessness and unsafety; negative self-perceptions; as well as difficulties in coming to terms with the experience. In the same research study the above-mentioned authors state that interviews conducted with these victims indicated severe stress reactions in response to the threat of physical harm. Physical injuries sustained in these hold-ups included knife, gunshot, and assault wounds, being doused in paraffin, broken bones and lacerations due to beatings. The psychological symptoms reported by the sample of participants comprised nightmares, generalised anxiety, debilitating fear, hypervigilance, nervous problems, deterioration of social life, generalised feelings of mistrust towards others, fear of repeat victimisation, feelings of morbidity, loss of quality of life, other negative affect and self perceptions, as well as self-blame.

A number of victims who participated in this research conducted by Stewart and Davis reported that they had been almost unaffected by the robberies. The lack of any significant reaction claimed by these victims is explained as being a defensive response to protect the self against hurt and devaluation (Carson and Butcher in Stewart & Davis, 2003).

- **Multiple armed robberies in the workplace**

This type of trauma may differ in terms of its presentation in comparison with other types of trauma. According to Eagle (in Friedland, 1999) repetitive trauma suggests being victimised by the same stressor at different times, while multiple trauma indicates that the traumatic stressor is an ongoing threat within the environment.



Frieze and Bookwala (in Zeidner & Endler, 1996) also include the 1985 research findings of Leymann, who concluded that victims of multiple crimes showed significant levels of stress and fear of repeat victimisation. According to the researcher, unlike other types of trauma where repeat incidences result in less stressful reactions, victims traumatised by crime reacted differently to repeat attacks. The research involved a longitudinal study of bank workers who had been repeatedly victimised in armed robberies. The concluding findings were that victims displayed heightened stress reactions, rather than less. In other words, they had not become desensitised. The reason provided was that the victims felt that their lives lacked safety, and the perception was that nothing could be done to prevent being victimised again.

Studies carried out in 1983 by Scheppele and Bart, (in Zeidner & Endler, 1996) suggest that victims of repetitive armed robberies may no longer see the world as a safe and benevolent place. Their awareness of their own mortality also becomes increasingly heightened. In addition, the researchers suggest that the victims' basic beliefs concerning the inherent goodness and potential of people and their future existence, are destroyed. There is a painful realisation that, even if they strive to live decent lives, there is no guarantee that only positive events will transpire in their daily living.

Herman (in Horowitz, 1999) refers to on-going and repetitive trauma as resulting in complex PTSD symptom manifestation. This complex post-traumatic syndrome is currently being considered for inclusion under the title *DeSno* within the DSM-IV-TR. As emphasised by the author, the simple PTSD diagnosis lacks the necessary concepts to accurately depict the

symptoms of survivors of repetitive and chronic exposure to traumatic episodes, such as the participants researched in the current study.

## CHAPTER 3

### THE RORSCHACH INKBLLOT TEST AS A RESEARCH METHOD

#### 3.1 An introduction to the Rorschach test

The Rorschach Inkblot Method (RIM) or the Rorschach test (both terms will be used interchangeably), has been used as an assessment measure for many years. Over these years it has been acknowledged and recognised as an in-depth, complex and multi-faceted method of evaluation in assessing different aspects of personality structure and functioning.

The Rorschach test was designed in 1921 by a Swedish psychiatrist, Herman Rorschach (Exner, 1993). According to Rose, Kaser-Boyd & Melloy (2001), the RIM is considered by many to be one of the strongest assessment tools in use. The number of individuals to which this test is administered worldwide on an annual basis is in excess of one million. As stated by these authors, the only competitor to this measuring instrument, in terms of popularity, is the Minnesota Multiphasic Personality Inventory Test (MMPI).

According to Rose et al. (2001), it is envisaged that the Rorschach test will continue to enjoy popularity in the future, which is based on various factors, namely that it is considered to be easy to manage and administer; it provides considerable information regarding the individual; it is viewed as having the potential to elicit unconscious defences; it is resistant to faking; and when used by a trained professional, serves as a valuable psychometric test instrument.

##### 3.1.1 The nature of the Rorschach test

Rather than viewing the test as a 'psychological x-ray', Rose et al. (2001) describe it as an assessment tool which measures the structure of the personality. This specifically includes the cognitive, emotive, and coping functions of the individual, as well as ego strengths and deficits.

Exner and Weiner (1982) states that the RIM can be conceptualised as either a

“perceptual-cognitive task or as a stimulus to fantasy” (p. 3). When viewed as engaging an individual in a perceptual-cognitive exercise, the respondents provide answers based on the attention that they have given to relevant details of the stimulus fields. In addition, their formulated responses are based upon their own needs as they substantiate their impressions of the objects that they have perceived. As a perceptual-cognitive task, the structure of the respondent’s answers assist in drawing conclusions regarding personality structure. In defining personality structure, Exner and Weiner (1982) describe it as the basic functioning personality, comprising enduring characteristics, coping mechanisms, coping styles, and possible problem areas, which form the essence of human interactions. The manner in which the test is approached, as well as the nature of the respondent’s responses are relevant, as they are indicative of the individual’s general style of thinking, perceiving and behaving in other life contexts.

Although some (Rose et al., 2001) refer to the RIM as a projective measure, Exner (1993) clarifies the test as being one which stimulates a variety of cognitive and perceptual functions. While he acknowledges that the test is able to facilitate some potential for projections, which assist in gaining insight into the functioning of the individual, he stresses that it does not provide an x-ray of the participant’s mind. In other words, the test contributes to some understanding of the “psychology of the person” (p. 54) in terms of both present and future functioning.

### **3.2 The systems of the Rorschach test**

Various systems for interpreting the Rorschach Inkblots have been used over the years. In 1990, John Exner standardised the Rorschach test into a more objective measure of coding and interpretation, namely the Comprehensive System (CS). The CS method facilitates the standardised scoring, interpreting and analysis of each Rorschach response.

### 3.2.1 The Comprehensive System (CS)

Rose et al. (2001), and Wood, Nezworski, Lilienfeld, and Garb (2003) highlight the efficacy of the Comprehensive System. The CS was born out of an integration of the best aspects of the five methods of administering the RIM, which dominated at that time. As stated by Meloy et al. (1997), the CS method is an atheoretical, empirically-motivated approach, which involves a scoring process which is structured and standardised. According to these authors, the CS method contributed towards restoring respect and credibility to the Rorschach as a valuable psychometric instrument. Rose et al. (2001) applaud the CS method, stating that Exner, together with his colleagues, not only established a considerable normative database, but also provided clear guidelines for a standardised system for the test setting and administration procedures.

- **Administration procedures**

In administering the RIM in accordance with the standardised guidelines outlined by Exner (1993), consideration must be given to the set of the participant, the environmental context, the seating outlay, as well as adequate preparation of the participant.

According to Exner (1993), it is only after ensuring that the environment and seating arrangement are in order and the respondent appropriately briefed regarding the nature and expectations of the test, that administration can commence. In the Response or Association Phase, the first of the two phases, the participant is presented with each of the ten inkblots, one at a time and simply asked 'What might this be?'. Answers are recorded verbatim and when all ten cards have been presented, the second phase, referred to as the Inquiry, can

be administered. During this phase the examiner repeats each response provided verbatim, followed by questioning the participant in terms of where on the inkblot the image was seen. Additionally, the respondent is asked what on the card had made it look like that. The examiner then records the information regarding where the stimulus was seen on a location sheet.

- **The coding system**

The CS's coding method provides valuable data regarding the structure and functioning of the participant. This method involves coding or translating a participant's responses into the corresponding Rorschach symbols, which then yield interpretative data. Exner (1993) states that the participant's responses are an integrated "set of operations that involve processing, translating, conceptualising, decision making, and sometimes projection" (p. 321). The responses of participants are coded according to a basic format, on a standardised coding sheet, and comprise five basic categories.

Exner (1993) lists these categories as Location, Determinant, Form Quality, Content, and Popular Responses. Also included on the coding sheet are Organisational Activity, Special Scores, and Developmental Quality.

A standardised, Structural Summary form is then completed by utilising the information from the coding sheet. The symbols coded on the coding sheet are converted by calculating ratios, percentages and tallying frequencies. The various clusters of variables included in the Structural Summary comprise: Affective Features, Capacity for Control and Stress Tolerance, Cognitive Mediation, Ideation, Information processing, Interpersonal Perception, Self-

Perception, and Situationally-related Stress. Once translated to the Structural Summary form, the indices are reviewed on a Constellation worksheet.

The final part in the process before analysing and interpreting the raw data is to identify the first positive key or tertiary variable. The first positive variable serves to determine which sequence of cluster interpretation will provide “the most substantial information about the core psychological features of the participant” (Exner, 1993, p. 347).

- **Interpretation of the protocol**

In order to interpret the raw data of the respondent, the examiner works according to specific guidelines, making use of working tables, normative data, and reference samples to facilitate the total integration of the information (Exner, 1993). A comprehensive clinical report on the total formulation of the psychology of the participant is the end product. This not only includes the findings of the protocol, but also the clinical impressions, observations and history of the participant. As noted by Exner, the interpretation of the test requires that the interpreter be well equipped in terms of having the appropriate knowledge, skill, and experience in working with the CS.

- **Clusters of variables**

Exner (1993) elaborates on the various cluster groupings as follows:

**Cognitive triad**

- A number of variables are contained within the three clusters that comprise the cognitive triad. The three clusters include the Information Processing, (taking in the information) Cognitive Mediation (translating this information that has been taken in) and Ideation (formulating the data that

has been translated clusters. Although each of these clusters are separate, they are nevertheless closely connected to each other. Only the specific variables that are contained within the Perceptual Thinking Index are detailed below, as these form the main area of interest in the current study.

- **The Perceptual Thinking Index**

The Perceptual Thinking Index comprises a number of variables that provide information regarding the participants' information processing and mediational functioning. The independent variables that are contained within this index are XA%, WDA%, X-%, Sum of Level 2 responses and weighted Sum 6. According to Exner (in Du Preez, 2002) there is no specific cut-off mark for the PTI. Instead, this index is considered relevant when the score is equal to or more than three ( $PTI \geq 3$ ). This  $PTI \geq 3$  has led to a 79% accurate "classification rate when comparing schizophrenic patients with mood disorder patients" (p. 67). The PTI is discussed in detail in Chapters five, six and seven that follow.

**Controls cluster: Capacity for Control and Stress Tolerance**

This cluster is concerned with the ability of the participant to make use of available resources in order to cope with stimulus demands. This cluster includes a total of seven variables. These variables include the Erlebnistypus (EB), Experience Actual (EA), Experience Base (eb) and the Experienced Stimulation (es). Additionally, this cluster comprises the Coping Deficit Index (CDI), D Scores (D) and Adjusted D (Adj. D) scores. The D Score indicates the participant's current capacity in terms of control. The Adj. D Score



provides information regarding the participant's general, or more constant tendency in terms of being able to formulate and exercise control in daily functioning. When the ability to exercise control is increased, the capacity for stress tolerance is also strengthened. Chapters five, six and seven elaborate more extensively on the D and Adj D Scores which form the second part of the research's focus.

### **Affective cluster**

The affective features of an individual are important in terms of psychological functioning as emotions impact on the participant's ability to think, judge, make decisions, and behave appropriately within a given context. The structural variables that relate to the Affective Cluster include the Depression Index (DEPI), the EB, and where applicable the EB Pervasive (EBPer). In addition, the information to the right side of the eb, the FC:CF +C ratio, Blend lists, Affective ratio, Space, Colour Projection answers, and pure C responses are all relevant to this cluster.

### **Self-perception**

The data in this cluster provides information from which an idea of the participant's self-image and self-esteem can be derived. The Egocentricity Index is central to this cluster and indicates an approximation of the participant's level of self-esteem and self-concern. Reflection responses become an important variable to consider, as well as the Form Dimension and the presence of Vista responses. Other variables, which are included within this cluster, are Human content, Anatomy, Morbid, Movement, and X-ray responses.

### **Interpersonal perception**

As stated by Exner (1993), it is not easy to interpret information from the RIM in respect of the manner in which a participant perceives and interacts with others. However, the information provided from this cluster lends itself to providing insight into the attitudes, needs, sets and coping styles that are often predominant in people. To illustrate, some of the information that can be gleaned from the variables in this cluster include whether a person is guarded, distant or inept in interacting with others; whether they display a tendency toward dependent behaviours; whether they are worried about issues of personal space; and whether their contact with others occurs on a more superficial level.

### **Special Indices**

The CS method includes seven Special Indices that serve to highlight the presence of any specific areas of relevance in understanding the participant's psychological functioning. The Special Indices include the Depression Index (DEPI), the Hypervigilance Index (HVI), the Perceptual Thinking Index (PTI), the Obsessive Style Index (OBS), the Suicide Constellation, and the Coping Deficit Index (CDI).

These indices also serve to indicate some of the initial criteria to identify the first positive key variable for a participant, which indicates the sequence according to which the interpretation will be made.

### **3.3 Research using the Rorschach test**

Over the last twenty years, the popularity of utilising the RIM as an assessment tool does not appear to have changed. In 1984, Lubin, Larsen, Matarazzo, and Seever (in Beutler &

Berren, 1995) stated that the Rorschach was one of the most regularly, as well as most widely used psychometric tests. Furthermore, it has been the test that has been the most extensively researched. In an article which highlights the value of the Rorschach test, Weiner (2001) reiterated this view in his discussion on the benefit of using the Rorschach as a measuring instrument. As stated by the latter author, with the exclusion of the MMPI, the RIM has resulted in the most published research of all personality tests.

According to Weiner (2001), this is indicative of the RIM being a test that produces reliable information regarding a participant's personality. In addition, not only does the test lend itself to providing information regarding the dynamics and psychological functioning of the person, but also becomes a source of valuable data which can contribute to increased understanding of maladaptive and psychopathological behaviour (Exner & Weiner, 1995).

### **3.3.1 The Rorschach test, PTSD and impaired reality testing**

According to literature (Cerney, 1990; Wilson & Keane, 1997; Goldfinger et al., 1998; Holaday, 2000), the Rorschach test has been effectively used in the assessment of trauma and trauma-sequelae disorders. Wilson and Keane (1997) state that the first studies using the RIM as a measuring instrument for trauma participants, were mostly focused on Vietnam combat veterans. These authors include Rorschach data published by Hartman et al. in 1990 which indicates that amongst participants diagnosed with PTSD, there was evidence of distorted perceptual functioning and impaired reality testing.

In 1985, Kowit (in Cerney, 1990) sought to establish the relationship between traumatic episodes and symbol formation in the RIM. His concluding statement was that trauma is not an isolated occurrence, but that instead the disturbing event links

up with existing problems and fantasies, which form part of the present personality structure.

As indicated by Beutler and Berren (1995) as a test instrument, “cognitive and ideational processes are tapped quite extensively by the Rorschach” (p.199). The participant’s view of consensual reality can thus be effectively measured. In 1993, Kaser-Boyd (in Wilson & Keane, 1997) examined the protocols of a sample of women traumatised by spousal abuse. Subsequent to comparing the data from these traumatised participants with the findings of other victimisation research (Hartman et al., & Swanson et al., in Wilson & Keane, 1997) Harman et al. and Swanson et al. concluded that there appears to be a common element prevailing in the experiences of participants who are confronted with inescapable violence. This was evidenced in the manner in which the stimuli of the inkblot cards were perceived and processed. The author furthermore added that there is consistent evidence of participants adopting an unconventional view of reality or perceptual distortions, or both.

In a Rorschach study that compared a sample of 35 children and adolescents diagnosed with PTSD, with 35 children diagnosed with Oppositional Defiant Disorder (ODD), Holaday (2000) challenges Exner’s (1993) viewpoint that only schizophrenic patients present with impairment in perceptions and thinking. She concludes that the findings from her research revealed problems in the areas of disordered thinking as well as impaired perceptual abilities, making the RIM an effective tool for determining the presence of such problems in an individual.

### **3.4 Concluding remarks**

Recent findings from research with children (Holaday, 2000), and adults (Hartman et al., & Swanson et al. in Wilson & Keane, 1997; Alao et al., 2003), indicate that trauma victims

present with abnormal or atypical reality testing, disturbances in thought processes, and inaccurate perceptions. Prior to the 1980s, sufferers of PTSD were often misdiagnosed with Schizophrenia due to psychotic symptom presentations (Alao et al., 2003). These authors conclude that the most commonly found psychotic features, amongst their research sample of PTSD sufferers, were auditory hallucinations and persecutory delusions. Additionally, psychosis is postulated as correlating with victims who have sustained long-term, chronic, or severe traumatic episodes.

## CHAPTER 4

### METHODOLOGY

#### 4.1 Participants

The current study made use of a single sample group, comprising 15 male South African residents ( $N=15$ ). All participants are currently permanent residents in South Africa. They are however, all of foreign nationalities, and are either the proprietors or managers of small retail businesses.

##### 4.1.1 Recruitment of sample group

The original research proposal listed the participation of an independent, private school in Gauteng, in terms of the recruitment of participants. The school had agreed to assist in enlisting trauma victims by liaising with various parents whom it was known had been victims of armed robbery. However, due to ethical constraints, (respecting the privacy of parents) the school informed the researcher that they had reconsidered the idea, deciding against extending a public invitation to parents. The alternative was to enlist the assistance of teaching personnel who would privately and discreetly approach parents with a view to their participation in the study. Those parents who had sustained more than one armed robbery, and were willing to participate, were to be given the researcher's contact details to arrange for their voluntary participation in the study. This was, however, to prove unsuccessful in recruiting participants and none of the sample group were obtained via this route.

The 15 participants in the research group were therefore obtained by word-of-mouth. The sample group of research participants was made up of the first 15 victims who confirmed their willingness to participate in this descriptive study. This type of

research group would then be referred to as an opportunity sample (Rosnow & Rosenthal, 1996). Participation was voluntarily and no remuneration was provided.

#### 4.1.2 Selection criteria

The selection criteria which determined the participants' inclusion in the descriptive study, entailed the following:

- Each participant must have been involved in armed robberies more than once in the same place of employ.
- Each participant should still currently be employed in this workplace where all of the robberies transpired.
- Each participant should be male.

All 15 participants met with these selection standards.

PTSD was not a criteria for sample selection and all 15 participants confirmed that not only had they never received any formal diagnosis for this disorder, but also, had no previous history of psychiatric illnesses. In addition, only 1 participant (7%) was currently receiving professional assistance from a psychotherapist, after sustaining a third armed robbery in his retail business within a space of four months. This latter participant had only recently sought therapy and had attended only two sessions thus far. One (7%) of the participants did however, subsequent to the interview, request to be referred to psychotherapist assistance. One (7%) participant decided to seek assistance from a medical practitioner, with a view to obtaining prescribed medication, while another 1 (7%) was indecisive regarding the option of seeking therapeutic intervention. The remaining 11 (73%) participants rejected such a course of action. These 11 participants were of the opinion that psychological assistance would not be of any benefit.

#### 4.1.3 Ethical considerations

Each participant was furnished with an invitation for participation (attached as Appendix A), which provides a self-explanatory outline of the basic aims and intentions of the research endeavour. Together with this the 15 volunteers were requested to read and complete a voluntary consent form (attached as Appendix B). While the latter served as a confirmation of willing consent, the invitation for participation provided a clear understanding of the intentions and aims of the research study. Furthermore, participants were advised that should they be interested in the outcome of the research study, they were at liberty to contact the researcher with a view to determining where such information could be obtained.

#### 4.1.4 Demographic information

Of the sample group, 13 of the participants (87%) are proprietors of retail businesses and the remaining two participants (13%) are employed as managers of such retail businesses. The retail businesses are operational in metropolitan areas in Gauteng. Of the 15 participants ( $N=15$ ), 1 participant (7%) had been the victim of six armed robberies, two participants (13%) of four armed hold-ups, eight participants (53%) at least three times, and the remaining four participants (27%), twice.

At the time of conducting the interviews, the majority of the participants ( $N=11$ ) rejected the idea of seeking either pharmacological or psychotherapeutic and were unanimous in their agreement of the futility of such a course of action. The consensual view amongst this group of eleven participants, was that the threat of repeat victimisation is still a reality for them, and that unless personally experienced, such trauma cannot really be fully comprehended by non-victims and health professionals.



The language medium used during both the interviews and test administrations, was English. However, English is the home language of only 3 (20%) of the participants. Three participants (20%) are of Portuguese nationality and struggled to articulate themselves in English. These 3 participants experienced some difficulty in finding the correct English words to express what they saw on the blots. They indicated this by frequently requesting assistance from the examiner in terms of translating certain words into English (the examiner is able to speak Portuguese). In addition, they would engage in vocal interferences such as 'uh', 'er', 'hmm' and 'you know', as well as lengthy pauses before attempting to provide a certain response. The CS method has clear guidelines in terms of the examiner of the RIM refraining from any verbal or nonverbal behaviour that may influence a participant's response. The researcher adhered to this standard and only provided an English word equivalent when the participant had actually provided the word in Portuguese. When the participant sought more assistance than this and appeared to want the examiner to formulate the answer, the examiner remained supportive but encouraged the participant by stating, "take your time," or "There is no hurry," or "I'm sure what you are trying to say will come to you eventually." These 3 participants did, however, manage to provide adequate responses to both the interview questions as well as the RIM.

All participants in the sample group currently reside in the suburban areas of the Gauteng province, and are permanent citizens of South Africa. Of the 15 participants ( $N=15$ ), the nationalities were as follows: nine Portuguese (60%), two Greek (13%), one Jewish (7%), two Zimbabwean (13%) and one French (7%).

The ages of participants range from 24–51 years. The mean age of the participants is 40.73 years. Education levels attained in terms of formal school years completed, yield a mean of 10.93 and a standard deviation of 1.00. This demographic information

is listed hereunder in tabulated form.

**Table 1: Demographics: Age, nationality and education of sample group**

Age	No.	%	Nationality	Number	%	Education	No.	%
20-30	1	7%	Greek	2	13%	Post Grad.	1	7%
31-40	6	40%	Portuguese	9	60%	Matric	6	40
41-50	6	40%	Jewish	1	7%	Grade 10	8	53%
51-55	2	13%	French	1	7%	<Gr.10	--	--
			Zimbabwean	2	13%			

Of the 15 participants, 10 are married (67%), 3 have permanent live-in partners (20%), and 2 participants are unmarried (13%). With the exception of 1 black man, the remainder of the sample group is white in terms of race.

**Table 2: Demographics: Marital and economic status and race of sample group**

Marital Status	Number	%	Economic Status	Number	%	Race	Number	%
Single	2	13%	Lower	0	0	White	14	93%
Perm Liv.	3	20%	Low upper	4	27%	Asian	0	0%
Married	10	67%	Mid. Upper	11	73%	Black	1	7%
Divorced	0	0%	High upper	0	0%	Other	0	0%

#### 4.2 Data collection procedures

As stated in Chapter 3, the instrument selected for accumulating the raw data is the RIM.

The Rorschach method of interpretation applied was the CS. The administrator of the RIM

test was also the researcher, a clinical psychology post-graduate, who has received the appropriate training in applying the CS.

#### **4.2.1 Setting**

In order to reduce intrusiveness, as well as demonstrate respect to the participants who had given up their own limited private time, the participants were given the option of determining the date, time and venue of the test setting. The researcher did, however, indicate the absolute need for privacy and an interview setting wherein there would be no disturbances or interruptions. Thus all interviews and test administrations were conducted in a private office with only the interviewer and interviewee present. In accordance with the instructions of the CS, the set of the participant, the set of the environment, seating requirements and preparation of the participant, were all systematically applied and adhered to.

#### **4.2.2 Interview administration procedures**

After introductory formalities were made and introductory letters presented, participants were asked to complete the consent forms. The interviews, according to a semi-structured format (attached as Appendix C) were then completed.

- **The Semi-structured interview**

The formal interview served to provide important historical and demographic data regarding each participant, as well as to limit interviewer bias. In addition to the demographics, the researcher made enquiries in respect of all pertinent information relating to the armed robberies sustained. The questions posed included the length of time between hold-ups; physiological and psychological reactions subsequent to each event; injuries sustained; time of day of robberies; support structures in place; changes in worldviews and life meanings subsequent to hold-ups; support and intervention or assistance received after

the robberies; whether trauma counselling was sought; current medication prescriptions; symptom presentation; current perceptions of possible repeat victimisations; current worldviews; current perceptions of safety and police protection; and, whether they were still psychologically affected by the events.

- **Administration of the RIM**

The participants were well prepared in terms of the nature and procedures of the RIM and the test was duly administered. Each of the 10 Rorschach cards were presented individually, followed by the question “What might this be?” Subsequent to completion of the Response Phase (the initial part of the RIM test), the participants were well prepared and instructed in terms of the final part of the test, namely the Inquiry Phase. During this phase, participants were instructed to state where on the card the response had been seen and what on the card had made it look like that. This was done after each response for every card was read back verbatim to the participant by the examiner. The aim during this phase is for the examiner to see the response in the same way as the participant has seen it. All answers provided by the participants were recorded verbatim.

Subsequent to the completion of the interview process and administration of the Rorschach test, participants were contained and thanked for their participation. Assurances of discretion and confidentiality were re-affirmed. Participants were also offered the option of obtaining professional therapy referrals via the researcher, in order to facilitate the working through of the traumatic experiences.

The interview responses and RIM protocols were then formally documented and prepared for analysis. This entailed allocating research codes to participants' records and typing up their verbatim responses. The typed protocols were then coded onto the specified coding sheets. Information from the coding sheet was checked with an independent coder, who was blind to the research content. The coding of the protocols was checked for a third time, jointly with an additional rater. Once complete, the data was entered into the Rorschach Interpretive Assistance Programme-4(RIAP-4)(Exner & Weiner, 1999) which will now be referred to as the (RIAP-4) computer system. This provided the structural summaries, constellation tables, brief statistical information, as well as a detailed analysis and report for each participant.

### 4.3 Analysis

Each participant's protocol, analysis and report were assessed. Influential variables, such as the EB (Erlebnistypus) and the L (Lambda) were evaluated, and are discussed in Chapter 5.

- **Validity**

Paramount to the validity of a protocol, is the number of responses provided by each participant. Exner's guideline for the number of responses required to validate a protocol, is at least 14 (Rose et al., 2001). For the current research, this criterion was met, and each of the 15 participants provided at least the minimum requirement of 14 responses per protocol.

- **Variability of R (Responses)**

The variability in the number of responses across the 15 protocols of the participant group yielded a mean of 20.20; a mode (value which appears most frequently in the

distribution) of 15; and a median (the centre of the spread of scores) of 20.00.

- **Interrater reliability**

According to Exner (1995) it is recommended that the researcher be the only examiner in the administration of the RIM tests as well as code each of the protocols. To achieve interscorer reliability, it is recommended that another or other independent coders score 25% of the protocols. These raters should also be blind to the research topic. To ensure interscorer reliability and given the fact that the researcher was the only administrator of the RIM, the number of protocols that were coded by an independent coder, was increased to 47%.

The researcher coded each of the protocols. Thereafter, an additional rater worked in conjunction with the researcher in a second coding exercise of the same protocols. A third independent rater, who was blind to the research subject, was then recruited to code seven (47%) of the 15 protocols.

Since the early 1980s, the calculations for intercoder reliability data have been computed by comparing percentages of agreement between coding sheets of independent raters. In other words, the researcher compares the coding sheets of the independent coders against the original scoring sheets, completed by the administrator of the test. In this case the administrator and the researcher are one and the same. Therefore, each of the individual responses of the raters are subsequently compared, in order to assess and determine the percentage of correct agreement between them (Embretson & Hershberger, 1999). As stipulated by Exner & Weiner (1995), the interscorer agreement for RIM research studies is required to be at least 80%. The percentage of agreement for the current study is 88%. The

percentage of agreement for each of the different variables on the coding sheet has been tabulated (See Table 3 below).

**Table 3: Interrater reliability table**

Partici- pant	Total Resp.	Loc.	DQ	Zsc	Deter.	Blend List	FQ	Pair	Content	Pop	Special Scores	% of Agree
C	15	15	13	11	14	14	14	14	R21/17	14	R17/10	86%
D	15	13	11	10	14	13	11	15	R22/20	15	R16/13	85%
F	17	14	16	16	16	16	14	17	R22/19	16	R18/15	90%
G	29	27	24	27	27	27	20	28	R40/36	27	R33/24	88%
H	24	20	23	22	21	21	17	24	R32/26	22	R26/18	86%
J	23	22	20	21	21	21	19	23	R32/29	23	R30/25	91%
M	20	18	20	19	17	19	18	20	R28/26	20	R25/10	88%
% of Agree.		90%	89%	89%	91%	92%	79%	99%	88%	96%	73%	<u>88%</u>

- **Calculations formulated on percentage of agreement of each variable**

#### 4.4 Concluding remarks

Despite the general consensus amongst participants that relating their experiences of the robberies with others was not considered a beneficial exercise, the majority appeared to engage positively in the interview process. The impressions formed by the researcher during the interview and test procedures were that participants appeared to have a need to talk about their experiences. Elaborating extensively on all the finer details of the traumatic events was a similarity found amongst the participants. In other words, the interview and test procedure appear to have been therapeutic in themselves, with participants displaying a need to communicate their experiences.

As persons of a different race had held up all 15 participants, the majority felt that they had become more racialistic since the attacks. The research participants thus found it difficult to

reconcile the idea of living contentedly in the new South African, multi-cultural society. Intense hostility and anger became evidenced by most of the participants when asked to furnish personal information regarding the impact of the specific details of the attacks.



## CHAPTER 5

### THE RESULTS

#### 5.1 Introductory comments

Chapter 5 provides a description of the results extracted from the analysis and interpretation of the participants' protocols, as well as a discussion of these findings. The interpretative results are based on the information yielded by the (RIAP-4)(Exner & Weiner, 1999). This programme provides computer-generated quantitative information as well as reports based on the CS. Analysis and interpretation have also, in some instances, been conducted in consultation with relevant Rorschach manuals and literature. While the variables that form the main focus of the research study include the PTI as well as the D and Adjusted D Scores, other variables which contribute additional information have been included towards the end of this chapter.

#### 5.2 Indices of perceptual functioning

Of the total sample group, 11 participants (73%) scored three or more on the PTI. This indicates that the majority of the participants (73%), can be described as, or are experiencing serious mediational and ideational impairment. As the variables comprising the PTI, form the main focus of the study, each variable is discussed separately, as well as detailed in Table 4 (see Table 4)>

- **XA% and WDA%**

These variables form the basis from which information regarding mediation is obtained, and are generally reviewed together. It describes the degree to which a participant's mediation results in responses that are appropriate to the context. The XA% is indicative of the participant's ability to appropriately apply a good form fit to the observed stimuli in general, whereas the WDA% includes responses which apply a good form fit to Whole

(W) and Common Detail (D) blot areas (Exner in Du Preez, 2002). The value of the XA% and the WDA% is generally similar to each other, with the latter often being slightly larger (Exner in Aronstam, 2003).

The mean score for the XA% of the research sample is 0.50, standard deviation 0.11, mode 0.47, and median 0.48. The mean score for the WDA% is 0.60, standard deviation 0.13, mode 0.70, and median 0.63.

- **X-%**

One of the most important variables providing information regarding the extent to which a participant's perceptual-mediational functioning is distorted, is the X-%. This variable represents the degree to which a participant's responses disregard the appropriate use of the features of the inkblots. Thus the participant will provide responses that are uncommon. These responses will include perceiving objects that are difficult or impossible to detect, to the extent that these answers violate reality (Exner, 1993).

In this study, the mean score of the X-% obtained by the total sample group is 0.50, standard deviation 0.12, mode 0.53, and median 0.52. According to Exner (in Aronstam, 2003), when the X-% is higher than 0.30 severe mediational impairment is evident. The mean score of 0.50 is significantly higher than this 0.30 figure and thus indicates serious and pervasive mediational dysfunction amongst the participants within the sample group.

- **Sum of Level 2 responses**

The critical special scores (Sum6 and Wsum6) serve to indicate where problems in terms of thinking processes have occurred, at certain times. According to Exner (in Aronstam, 2003), the sum of these special scores is used to provide information in respect of problems in conceptual thinking, and also addresses the topic of ideational clarity. These cognitive special scores are DV, INCOM, DR, FABCOM, ALOG and CONTAM. With

the exception of ALOG and CONTAM, these scores are allocated either a level one or a level two value, with the latter representing more severe problems in thought processes. Each of these scores are indicative of some type of dysfunction in terms of cognitive management, as well as ideational slippage.

In reviewing all of the 15 RIM protocols completed, the total number of participants who provided Level 2 cognitive scores was 9 (60%). In terms of how many of each of the differing Level 2 scores were scored by each of the nine participants, the specifics are as follows: 2 participants (13%) scored DR2 cognitive scores, 4 participants (27%) scored INCOM2 cognitive score and 5 (33%) of these participants scored FABCOM2's.

A breakdown of the specific quantity of each of the cognitive scores that were coded in total is: two DR2's (4%), six INCOM2's (12%) and six FABCOM2 (12%) cognitive Level 2 scores.

- **Weighted Sum 6**

An important factor in the interpretative analysis of the six critical special scores, is the frequency in which they appear in the participants' responses. As stated by Exner (in Aronstam, 2003), the Wsum6 is assessed in relation to the total number of responses (R) provided. Thus in order to interpret the finding, the researcher took the mean number of responses of the 15 participants, which was 20.20, and reviewed it against the mean of the Wsum6 scores, which was 12.40. As the mean of R is more than 17, and the Wsum6 is in the range between 11-17, the results indicate serious problems in the thinking processes of these participants.

**Table 4: Mediation and ideation variables scoring**

Participant	MEDIATION			IDEATION		
	XA%	WDA%	X-%	Lvl 2 SS	Sum6	Wsum6
A	0.71	0.77	0.29	0	3	7
B	0.55	0.59	0.45	2	4	10
C	0.41	0.64	0.53	1	3	10
D	0.47	0.70	0.53	0	2	4
E	0.62	0.67	0.38	0	3	12
F	0.65	0.79	0.35	0	1	4
G	0.45	0.54	0.55	2	5	13
H	0.42	0.45	0.58	0	3	7
I	0.53	0.63	0.47	2	10	25
J	0.48	0.52	0.52	1	9	20
K	0.47	0.70	0.53	0	1	3
L	0.59	0.71	0.35	1	1	7
M	0.30	0.35	0.70	2	7	25
N	0.27	0.36	0.73	1	3	12
O	0.50	0.57	0.50	2	6	27

The total sample group of participants ( $N= 15$ ) presented with significant impairment in their perceptual functioning and reality testing. The table that follows provides a breakdown of the results yielded by the Rorschach scores (see Table 5).

**Table 5: Table of participant's degree of perceptual impairment**

Participant	PTI Index	Reality Testing Impaired? (PTI > 3)	Degree of Impairment	SCZI Index
A	0	Yes	Mild	2
B	3	Yes	Severe	4
C	3	Yes	Severe	4
D	3	Yes	Severe	4
E	2	Yes	Moderate	3
F	1	Yes	Moderate	3
G	3	Yes	Severe	4
H	3	Yes	Severe	4
I	4	Yes	Severe	6
J	4	Yes	Severe	5
K	3	Yes	Severe	4
L	2	Yes	Moderate	3
M	4	Yes	Severe	6
N	3	Yes	Substantial	4
O	4	Yes	Severe	6

### 5.3 D and Adjusted D scores

According to Exner (1993), most adult participants present with Adjusted D Scores (Adj D) in the zero range. As the Adj D Score indicates a participant's more permanent disposition in terms of control and stress tolerance, Exner states that it is of more significance than the D Score. Adj D Scores of zero, suggest that participants have the necessary internal resources to cope with external demands and that they are able to effectively and consistently manage life's stressors. This is likely to change only if and when, participants are faced with extremely stressful and overwhelmingly difficult life contexts. Higher Adj D Scores of, for example +1 and +2, indicate that the individual has more than adequate capacities for control and stress tolerance. Participants who score in the minus range of the Adj D variable, such as -1 or -2, are often unable to function optimally. The reason for this is that the participants are in a state of overload, which means that the stimulus demands being

made on them exceed their internal coping resources. Such individuals also tend to process information ineffectively and may engage in impulsive behaviour.

The RIM index that incorporates the D and Adj D Scores is the Coping Deficit Index (CDI). This index provides information in respect of a participant's coping repertoire, as well as their capacity for controls and stress tolerance. The CDI is however, discussed more fully under the section detailing the relevant indices of the RIM (see par. 5.4).

### **5.3.1 Adjusted D Score results**

The scores obtained in the current study for the Adj D variable, found that only 3 (20%) of the 15 participants ( $N=3$ ) obtained Adj D Scores in the minus range. Two of these 3 participants also scored positively on the CDI. One participant (7%) obtained an Adj D Score of +2 and the remaining 11 (73%) participants obtained scores of zero (0). However, only 6 (40%) of these 11 participants can be described in accordance with the zero Adj D Score category. The reason being is that the other 4 (27%) of these 11 participants, obtained CDI scores of more than three ( $CDI>3$ ), together with their Adj D Scores of zero. The remaining 11th participant obtained an Adj D Score that was larger than the D Score.

The Adjusted D Scores yielded a mean of  $-0.07$ , median of  $0.00$  and standard deviation  $0.68$ .

### **5.3.2 D Score results**

In respect of the D Scores, 9 (60%) of the participants presented with scores in the minus range scores of which only 2 (13%) were significantly low. Thus, the two minus scores indicate that these participants tend to display an inability to effectively manage and control events in their lives in a productive manner. The mean yielded for the D Scores is  $0.80$ , median  $-1.00$ , and standard deviation  $-1.33$ .

Detailed below is a breakdown of the scoring results yielded by the RIM for the D and Adj Scores of the sample group.

**Table 6: D and Adjusted D Scores**

Participant	D Score	Adj D Score
A	0	0
B	-1	0
C	0	0
D	-1	-1
E	-1	0
F	-1	0
G	-4	0
H	0	0
I	-3	0
J	-1	0
K	-1	-1
L	0	0
M	0	0
N	-1	-1
O	+2	+2

#### 5.4 Inanimate Movement

As this variable is an indicator of situational stress as well as considers the D and Adj D Scores when interpreting the data, its inclusion is relevant. Inanimate movement (m) relates to situational stress and can have a significant impact on a participant's thinking and emotions or both. This variable is considered together with the SumY score. According to Exner (1993), when the value for (m) or the value for SumY is three times greater than the other one, it indicates the presence of situational stress. The findings for this variable

indicate that 5 (33%) of the participants ( $N=5$ ) present with noticeably elevated(m)scores.

When D Scores are less in value than the Adj D Scores, the interpretative meaning is that the participants are experiencing difficulties in terms of control and stress tolerance. In addition when these lower D Score values are also in the minus range, it indicates that the participants are experiencing chronic overload states in terms of situational stress (Exner in Aronstam, 2003). Six (40%) of the participants in this study's sample group present with D Scores that are less in value than the Adj D Scores and in addition are in the minus range.

**Table 7: Situationally-related stress variables of sample group**

Participant	m	SumY
A	2	0
B	3	3
C	1	0
D	0	0
E	3	0
F	3	0
G	9	3
H	1	0
I	5	3
J	2	1
K	1	1
L	0	1
M	0	0
N	0	0
O	0	0



## 5.5 The special indices

For the benefit of the reader, the distribution of the special index scores is included in order to provide a more comprehensive description of the sample group. These indices are included in the RIAP-4 computer programme of the CS as follows: the Schizophrenic Index (SCZI), the Depression Index (DEPI), the Coping Deficit Index (CDI), the Perceptual Thinking Index (PTI), the Hypervigilance Index (HVI), the Obsessive Style Index (OBS), as well as the Suicide Constellation. The current research findings regarding the results of each of these indices are detailed below. As the Suicide Constellation is significant in terms of assessing a participant's suicide risk, this is discussed initially.

- **Suicide Constellation**

In reviewing the suicide constellation, none of the 15 participants ( $N=0$ ) score positively on this index. However, as this is an important indicator of high-risk profiles in terms of suicidal ideation amongst participants, it is noteworthy to add that 6 (40%) of the sample group scored between 6 and 7 for this indice. As a score of 8 indicates a positive result on this index, this would technically exclude all of the participants as potential suicide risks. However, the scores yielded for this index by 40% of the participants (as stated above), are still relatively high and therefore are considered important to make mention of.

- **SCZI**

Although the CS method no longer formally includes the SCZI, it is, however, pertinent to comment on this index which was replaced by the Perceptual Thinking Index (PTI). The PTI was intended to be a revision of the SCZI, as the SCZI had been found to show higher false positive rates (Exner in Du Preez, 2002). The reason for its inclusion in the current study, is that of the 11 (73%) participants who scored positively on the PTI

(PTI $\geq$ 3), the same 11 (73%) participants also scored positively (SCZI $\geq$ 4) on the Schizophrenic Index.

- **DEPI**

The total number of participants who scored positively on this index was 4 (27%). One (7%) of these 4 (27%) participants also scored positively on the CDI together with the DEPI.

- **CDI**

The CDI provides information in respect of a participant's psychological resources, as well as their ability to deal with stress and complex life events, in a manner that is both effective and consistent. As explained by Exner (1993), participants who experience difficulties in coping with the normal demands of daily life are found to have scores of 4 or 5 on this index. These coping difficulties in turn, result in problems in other areas such social helplessness and ineptness, as well as unsuccessful or unrewarding interpersonal relationships. A positive CDI may also raise concerns in respect of capacities for control. Exner defines this capacity for control as "the ability to form and direct responses" (p. 363). However, when a participant has adequate capacities for control but this is coupled with social ineptness and social immaturity, there is a high probability of a predisposing vulnerability for difficulties in daily life.

Six (40%) participants scored positively on the CDI with three (18%) if them also presenting with corresponding low EA scores, as well as positive PTI scores. One of these participants (7%) obtained results indicating his data for control and stress tolerance was inconclusive. This means that in the absence of sufficient information in this participant's responses, a meaningful interpretation could not be made.

- **HVI**

A positive HVI score that a core element in the psychological structure of the participant expends a substantial amount of energy to ensure a continual state of guardedness and preparedness. Participants who engage in this type of hyper-alert mode of functioning, generally do so due to experiencing feelings of mistrust and negativity towards the world around them (Exner, 1993). In considering the total indices scored by the participating participants of the current study, only one (7%) participant scored positively on the HVI.

- **OBS**

According to Exner (1993), a positive OBS indicates a tendency to display behaviours that are inclined towards perfectionism, attention to detail, indecisiveness, and also problematic expression of affect. In terms of the latter, this pertains more to the display of negative emotions. In terms of their thinking processes, participants tend to adopt a meticulous and systematic manner in their approach. There were however, no participants within the sample group that scored positively on this index.

One participant (7%) within the research sample group did not score on any of the indices at all.

## **5.6 Response Styles**

Although not a central focus in the current study, the participants' particular response styles provide valuable information in terms of describing the sample group as comprehensively as possible. The Comprehensive System includes three basic problem-solving, or response styles which identify each participant's unique manner of approaching difficulties, as well as in decision-making. The general response style of each participant is important as the different approaches to problem-solving and decision-making have a direct impact upon individual behaviours. In addition, these styles have a significant influence on the

interpretations of some of the Rorschach variables.

### 5.6.1 Erlebnistypus ratio

The EB ratio (M:Wsum C) is indicative of a participant's preference toward a particular response style (Exner, 1993). This ratio is, according to Rose et al. (2001), one which compares the balance between form-based answers that comply with logical thought, and those responses that incorporate colour. The CS makes allowances for the identification of three different coping styles based on the EB data, namely ambitent, introversive, or extratensive styles of problem solving and decision making. High Lambda scores indicate avoidance tendencies and can also override some of the features of the other coping styles (Exner in Aronstam, 2003). A protocol with an average or higher amount of responses, together with a high Lambda, suggests that the participant's large number of F responses is more likely to indicate that the avoidance or simplification tendency is more stylistic in nature. In other words, the participant has a response style that is generally more prone to avoid, reject or ignore stimulus fields.

- **Extratensive style**

Individuals with this style of problem solving and decision making, normally do so by interacting between the self and their environment. In addition, they tend to intermingle feelings with thought processes when making decisions or solving problems. Thus, the extratensive style results in a more complex pattern of thinking as the participant's emotions impact on the ideation process. Their emotions also tend to be quite visibly and routinely demonstrated to the world around them. Participants with an extratensive style engage more routinely in trial-and-error behaviours when solving problems and making judgements. An

extratensive response style also suggests the ability to more readily accept logic systems that are imprecise or ambiguous (Exner, 1993).

- **Introversive style**

According to Exner (1993), participants who are identified in the RIM as introversive, rely more on their inner worlds when problem solving, fulfilling need demands and in making decisions. In addition, introversives are more prone to weigh up all possible alternatives before formulating and acting on a decision. A participant with this type of response style may present as socially outgoing, but when it comes to satisfying important needs, will tend use their inner life to do so. Introversive individuals tend to keep feelings on a peripheral level when formulating problems and making decisions, as well as have a preference for logic and precision.

- **Ambitent style**

An EB ratio that is equivalent or nearly equivalent on both sides is considered to indicate an ambitent coping style. An ambitent style is one wherein the EB ratio does not identify a particular response style and the participant's feelings are more prone to influence thinking, problem-solving and decision-making in an inconsistent manner. Thus at times the participant's ideational processes may be strongly impacted by affect while at other times, feelings may be kept on a peripheral level. This is considered to be the least effective of the styles and is one that is marked by inconsistency (Exner, 1995).

### 5.6.2 Results of response styles

In considering the participating group's particular coping styles, five participants

(33%) present as introversive, two participants (13%) present with an EB that is too sparse to indicate a distinctive coping style, one participant (7%) is avoidant introversive, one participant (7%) is avoidant ambitent, and one participant (7%) is avoidant extratensive. The remaining five participants (33%) are described as having an avoidant style ( $L > .99$ ). Table 8 offers a more visual representation of each participant's unique response style (See Table 8).

### 5.6.3 The Lambda score

Ritzler and Exner (in Exner, 1993) state that the Lambda score, which is a value calculated from the total number of pure F responses to the remaining responses, is an important stylistic indicator. A RIM protocol yielding a score in excess of .99 ( $L > .99$ ) is considered to be a high Lambda and a score of less than 0.31 ( $L < .31$ ), a low Lambda. Rose et al. (2001) state that a Lambda score is normally within the range of between .59 and .94, with a mean of .58. Thus participants that score high on Lambda are viewed as being prone to a more under-incorporative style, while those that obtain low Lambda scores, tend towards being more over-incorporative. Rose et al., correlate high Lambda scores with the individual who adopts a simplistic approach to the stimulus field, applies ineffective scanning (of the inkblots) and basically minimises or ignores important details of that which is perceived. According to Exner (1993), Lambda scores in excess of 0.99 also suggest that the participant is adopting avoidant behaviour or has an avoidant style.

### 5.6.4 The results of the Lambda scores

The mean score for the Lambda in the current study is 0.95, standard deviation 0.42, and median 0.82. As detailed in Table 8, of the 15 participants, 8 (53%) obtained a Lambda score above or below the average, while the remaining 7 participants (47%) scored within the normal parameters. More specifically, 7 participants (47%) had

Lambda scores in excess of .99, another participant (7%) obtained a score lower than the cut-off mark of 0.31, and the remaining 7 participants' (47%) scores are within the normal Lambda range.

**Table 8: Response Styles of the sample group**

Participant	EB	Lambda	Introversive	Extratensive	Ambitent	Avoidant (L> .99)	Too sparse to indicate
A	2:2.5	0.56		Yes			
B	6:1.5	0.67	Yes				
C	1:1.5	1.50				Yes	
D	3:0.0	0.67					Yes
E	5:4.0	0.53	Yes				
F	3:2.0	0.82	Yes				
G	2:1.5	1.07				Yes	
H	1:5.0	1.18		Yes		Yes	
I	6:1.5	1.13	Yes			Yes	
J	5:1.0	0.64	Yes				
K	3:1.0	0.25	Yes				
L	2:2.0	1.83			Yes	Yes	
M	2:2.5	1.50				Yes	
N	1:0.0	1.14				Yes	
O	7:0.0	0.78					Yes

### 5.7 Results of common variables found that exceed the current study's research aims

Although this research study intended to focus on the variables relating to perceptual thinking as well as controls and stress tolerance, a few other variables that do not fall within the parameters of the study, are included in this chapter. These variables appear to be commonly described amongst the majority of the sample group and have in some cases, also been similarly concluded in other RIM research on trauma victims.

### 5.7.1 Affective ratio

The Affective ratio (Afr) provides information regarding the degree of responsiveness demonstrated by participants, in respect of emotional stimulation (Exner, 1993). It is a variable that serves to indicate whether the participant is interested in becoming involved in emotional contexts as well as experiencing emotional stimuli (Exner in Aronstam, 2003). The Afr is reviewed together with the participant's particular coping style. As stated by Exner (in Aronstam, 2003), the normal range of the Afr for adults is as follows:

Extratsensive adults = .60 to .89

Introversive adults = .53 to .78

Ambitent adults = .53 to .83

Avoidant style = .45 to .65

The current study yielded a mean Afr of 0.48, with a standard deviation 0.26. In reviewing each participant's Afr together with their corresponding response style, 9 (60%) in the sample group ( $N=9$ ) present with scores that are well below the average (see Table 8). Two participants (13%) with Introversive styles fall within the normal range, while 2 of the participants (13%) with Avoidant styles have scores that are well in excess of the average range.

Individuals that score low on the Afr, such as is reflected in the current study, are prone to become socially withdrawn or isolated due to experiencing extreme discomfort around emotions. Low Afr's also indicate that participants will tend to display an avoidance of emotionally provocative stimuli. This avoidance can be due to excessive preoccupations with controls (Exner, 1993)



**Table 9: Affective ratio scores in the sample group**

Participant	Afr Ratio	Introver- sive	Extraten- sive	Ambitent	Avoidant (L> .99)	Too sparse to indicate
A	0.27		Yes			
B	0.18	Yes				
C	0.36				Yes	
D	0.36					Yes
E	0.63	Yes				
F	0.54	Yes				
G	0.45				Yes	
H	0.41		Yes		Yes	
I	0.26	Yes			Yes	
J	0.35	Yes				
K	0.36	Yes				
L	1.13			Yes	Yes	
M	1.00				Yes	
N	0.50				Yes	
O	0.33					Yes

## CHAPTER 6

### SYNOPSIS AND DISCUSSION OF RESULTS

#### 6.1 Introduction

In discussing and elaborating on the results of the current study, the sequential format of this chapter will follow the same presentation as that of Chapter 5.

#### 6.2 The Perceptual Thinking Index (PTI) and previous research results

As hypothesised by the researcher, the majority of the sample group (73%) described in this study present with positive Perceptual Thinking Indices ( $PTI \geq 3$ ). This suggests that the participants are experiencing significant mediational and ideational difficulties. According to Exner (in Du Preez, 2002), the PTI incorporates the participant's ability to accurately and appropriately input incoming stimuli (processing), translate this data (mediation), and conceptualise this information (ideation). The results from this study therefore indicate that the majority of the participants are experiencing severe disturbances in this regard. Their mediation and processing capabilities are significantly maladaptive, which in turn leads to severe impairment in their reality testing (Exner, 1993). The results of the XA%, WDA%, as well as the X-% not only indicate significant impairment in terms of both mediation and ideation within the sample group, but also suggest a severity that is associated with psychotic-like processes. In addition, the severity and pervasiveness of the mediation difficulties are reflected in the small difference (0.10) between the mean scores of the XA% and WDA% (see par. 5.2). These variables have been found in previous RIM studies, with their sample group also presenting with severe perceptual distortions. However, when comparing these previous research sample groups to the current study's participants, the extent of this study's sample appear to display more severe degrees of perceptual distortions than those in previous research studies. Results from these previous studies found that participants presented with severe distortions in reality testing and perceptual functioning, as well as bizarre precepts

(Hartman et al., in Allen, 1994; Swanson, Blount & Bruno in Allen, 1994; Levin in Wilson & Keane, 1994; Kaser-Boyd in Wilson & Keane, 1994; Goldfinger et al., 1998; Holaday, 2000; Alao et al., 2003).

Disturbed thinking has in the past been associated solely with psychotic disorders such as schizophrenia and schizophrenic-type disorders. According to Exner (1993), only schizophrenics present with both problems in terms of faulty perceptions and thinking impairment. However, as suggested by the literature and the previous RIM studies mentioned above, the presence of disordered thinking, as well as processing reality in an unconventional manner, may be associated with other functional problems. "It has been postulated that psychotic symptoms (especially auditory hallucinations) may be a sequelae of prolonged and severe trauma" (Alao et al., 2003, p. 24).

Prior to the 1980s, sufferers of PTSD were often misdiagnosed with schizophrenia due to psychotic symptom presentations (Alao et al., 2003). These authors conclude that the most commonly found psychotic features amongst their research sample of PTSD sufferers were auditory hallucinations and persecutory delusions. Psychosis is postulated as correlating with victims who have sustained long-term, chronic, or severe, traumatic episodes. According to Sadock and Sadock (2001) the term psychotic is applied when there is a loss of reality testing. It also implies a loss of ego boundaries and an impaired sense of self.

It is important to remember, however, that as formerly stated none of the participants have received any formal diagnosis of PTSD or any other categorised disorder within the DSM-IV-TR. In fact, the majority of the participants indicated that they were relatively unaffected by the repetitive traumas, and continued to function as they had done before. They rejected the idea of requiring professional assistance in coping with the traumas and considered their lives to be continuing as they had always done.

In 1990, Hartman et al. (in Allan, 1994) evaluated 41 war veterans with a diagnosis of PTSD. The findings of their research study revealed RIM responses that reflected disordered thinking processes and substantial impairment in reality testing. The results from their study yielded the following mean scores: “X+% = 0.56; and F+% = 0.50” (p. 338). Furthermore, in the same article, Allan includes the findings of research conducted by Swanson, et al. who concluded similar results amongst their sample of war veterans. In the latter study, 50 veterans from the Vietnam War, who had subsequently been diagnosed with PTSD, yielded scores suggesting maladaptive perceptual functioning. This impairment in terms of reality testing was indicated by the following scores: “X+% = 0.46; F+% = 0.48; and X-% = 0.29” (p. 338).

These findings have important relevance in terms of the RIM, in that when PTI results are positive and impaired reality testing is evident in a participant, the possibility of trauma-induced psychosis should be considered, and not just schizophrenic-type disorders. Marengo and Harrow conducted research in 1985, wherein they concurred that disordered thinking was not necessarily indicative of psychosis (Du Preez, 2002).

Each variable that comprises the PTI is now discussed separately hereunder:

- **XA% and the WDA%**

The mean score for the XA% for participants in the current study is 0.50, standard deviation 0.11, mode 0.47, and median 0.48. The mean score for the WDA% is 0.60, the standard deviation 0.13, mode 0.70, and median 0.63. According to Exner, (1993) the signal for severe problems in mediating incoming stimuli is indicated when the XA% falls between 0.65 and 0.74, together with a WDA% that drops below 0.65.

The XA% and the WDA% are reviewed together in tandem, in order to gain a more comprehensive idea of the participant's ability to appropriately apply a good form fit. In

general, the values of both of these variables are to be similar to each other, with the expectation that the WDA% will be slightly higher. When a participant's reality testing is intact and in line with conventional reality, the value of the XA% falls between 0.78 and 0.99 with a slightly higher WDA%. Thus, the significantly lower mean score of 0.50 for the XA% suggests that the participants are suffering from severe mediational impairment. Together with this, the WDA% value of 0.60 raises concerns as this score is interpreted as indicating that the participants in the current study are experiencing mediational dysfunction as well as impaired reality testing. The two variables are then compared to assess the extent to which this severe impairment is impacting on the functions of daily living. A difference of between 0.10 or more (as is the case in this study) between the two variables, suggests that the participants' levels of impairment becomes more obvious when the cues in the environmental stimuli become more ambiguous. The interpretative finding of the results yielded in the current study, indicate that the severity of the dysfunction is severe and pervasively so. The impairment in mediation is so significant that it resembles that of psychotic processes, not too unlike those found in the schizophrenic population.

- **X-%**

The mean score of 0.50 indicates a significant elevation in the percentage of this variable (above 0.30). Exner (1993) states that such an elevation is indicative of serious and pervasive mediational dysfunction. In addition, the more this percentage increases the higher the potential for inappropriate behaviour. As the main component necessary for accurate reality testing is impaired, these findings suggest that the 15 participants may be the victims of some disabling problem in this regard. The degree of the elevated mean score (0.50) thus implies that these participants will be highly prone to conduct

themselves inappropriately. The dysfunctional behaviour will in turn result in problems in interpersonal and social interactions.

- **Sum of Level 2 responses**

Results of this variable yielded the total number of participants who provided Level 2 cognitive scores as 9 (60%). The total number of special scores that was obtained by them is as follows : a total of 2 DR2's, 6 INCOM2's and 6 FABCOM2 cognitive Level 2 scores (see Chapter 5).

The DR2 responses are indicative of severe difficulties in ideational impulse control, problems in terms of being able to remain focused, as well as disjointed conceptual thinking (Exner in Aronstam, 2003). The INCOM2 scores suggest that participants employ strained reasoning and logic when conceptualising, to the extent that thinking takes on a bizarre appearance. These scores present most frequently when the thinking processes of a participant are hindered by preoccupations, or they indicate a lack of appropriate reality testing. Finally, the FABCOM2 responses raise more concerns as they indicate thinking processes which are even more bizarre, than those identified in the INCOM2 scores. The high number of FABCOM2 responses indicate severe distortions in conceptual patterns, which in turn significantly and detrimentally impact on accurate reality testing. There is a serious disregard for reality and “the judgements of participants are often flawed or overwhelmed, or both because ideation is not well controlled” (Exner in Aronstam, 2003, p. 98).

- **Weighted Sum 6**

The mean number of responses of the 15 participants ( $N=15$ ), which was 20.20, was reviewed against the mean of the Wsum6 scores, which was 12.40. The mean of R is more than seventeen (17), and the Wsum6 is in the range between 11-17. The

interpretative finding for this is that the participants present with serious thinking difficulties that involve periods of ideational discontinuity. In addition, the results suggest that the participants will tend to experience problems in terms of effective decision-making, as well as result in faulty conceptualisations and judgements (Exner in Aronstam, 2003).

### 6.3 D and Adjusted D scores

In considering the participants overall capacity for controls and stress tolerance, it is relevant to consider the first positive variable identified. When the first key variable reflects a D Score of less than the Adj D Score ( $D < \text{Adj D}$ ), a CDI of more than three ( $D > 3$ ), or an Adj D Score in the minus range, it clearly indicates that a participant is experiencing problems in terms of controls (Exner in Aronstam, 2003). (See Table 6). From this perspective, it would thus seem that of the 15 participants, 7 (47%) present with problems in this area.

The D and Adjusted D Scores obtained in this study are reflected separately hereunder. However, it should be born in mind that not only do these scores provide a crude estimate of a participant's current (D Score) and typical (Adj D Score) capacity for controls and stress tolerance, but are also included when reviewing the participant's level of situational stress (Exner, 1993). Situational stress will be included further into the chapter, under the discussion on the inanimate movement variable (m).

#### 6.3.1 Adjusted D results

The scores obtained in the current study for the Adjusted D variable, found that only 3 (20%) of the 15 participants ( $N=3$ ) obtained Adj D Scores in the minus range. Two of these 3 participants also scored positively on the CDI, while the 3rd participant (7%) obtained an Adj D Score of +2. The participant with the latter score indicates the capacity for greater control and stress tolerance. The finding for the 2 participants that have Adj D values in the minus range, is that they are in a state of extreme

stimulus overload. This suggests that their ability to sustain the stress and demands of daily life is inadequate, irrespective of their CDI scores. Furthermore, they will be prone to impulsivity and make decisions without thinking them through adequately. Although well structured situations will not present as too problematic, these participants will, however, experience substantial loss of control in less well-defined contexts. The remaining 11 (73%) participants obtained Adj D values of zero (0). However, only six (40%) of these 11 participants warrant the interpretation for an Adj D value of zero. The finding for these 6 participants is that they typically have adequate coping resources available in order to sustain and deal with daily demands and stress. The other 4 (27%) of the 11 (73%) participants obtained CDI scores of more than three ( $CDI > 3$ ), together with the zero Adj D Scores. Thus the interpretation for this 27% of the sample group is that their personality organisation tends to be immature. This in turn predisposes these participants towards being susceptible to experiencing problems with stresses and demands of daily functioning (Exner in Aronstam, 2003).

### 6.3.2 D Score results

In respect of the D Scores, 9 (60%) of the participants presented with minus scores, of which 2 (13%) were significantly low. Seven (47%) of these 9 participants scored D Scores of less than zero ( $D < 0$ ) which indicates that these participants currently, have a tendency towards impulsivity in so far as their feelings, thinking processes and behaviours are concerned. The remaining 2 participants (13%) D Scores, which were significantly low ( $D < -1$ ), suggests a high likelihood for disintegration. These low D Scores indicate that participants will thus be prone to display ineffective capabilities, in terms of the productive management and control of events in their daily lives. In addition, as highlighted by Exner (1993), low D Scores also indicate that participants may be experiencing a significant amount of situational stress.



In comparing the results of this study with that of previous research conducted on trauma victims, it appears that the mean for the D Score variables are not as significant as those obtained by these other researchers (Wilson & Keane, 1997). To illustrate, the mean for the D Scores in the current study was -0.80. In contrast Swanson et al., Sloan et al., and Levin, reflected D Scores respectively as follows : - 1.82 and -3.67, and -1.48 in (Allen, 1994). The difference in these research findings when contrasted with the current study, may be due to the fact that the majority of the participants in this research presented with Avoidant response styles. This response style can be related to the participant's capacity for controls and hinges on the way in which the participant utilises this capacity to avoid contexts which present as too complex or too ambiguous (Exner in Aronstam, 2003). In Exner's view, when the extent of the contexts becoming overly complex or ambiguous, the participants may be unable to successfully employ this capacity for control. The result will be an inability to sustain the demands being experienced by the participant and a consequent failed capacity to display adequate controls.

**Table 10: Mean D Scores obtained in previous research studies**

Researcher	Year of study	Mean D Score obtained
Swanson et al.	1990	-1.82
Sloan et al.	1995	-3.67
Current study	2004	-0.80

It would thus seem that the participants in the current study do not present with D scores that are as low as those concluded by other researchers.

#### 6.4 The special indices

- **CDI**

Positive CDI indices ( $CDI > 3$ ), were obtained by 4 (27%) of the 15 participants ( $N=4$ ), of which only 1 (7%) appeared to be experiencing overwhelming difficulty with situationally-related stress. This result indicates that these participants are encountering difficulties in terms of behavioural control. In addition, they may experience feelings of being socially inept, and helpless, as well as unfulfilling interpersonal interactions. Their behaviour will be marked by underdeveloped social skills and may experience difficulties in fulfilling social expectations. Feelings of depression may also accompany these social deficits and control problems (Exner in Aronstam, 2003). One participant who scored positively on the CDI index obtained results indicating that the data for control and stress tolerance for this participant was inconclusive. This means that in the absence of sufficient information in this participant's protocol, a meaningful interpretation could not be made.

- **Hypervigilance Index**

One of the interesting observations made in this research is the almost complete absence of participants obtaining a positive HVI. Only 1 (7%) of the total sample of 15 participants ( $N=1$ ) obtained a positive HVI.

Within the DSM-IV-TR symptoms of PTSD, hypervigilance is an important criterion, and therefore one would expect to find this feature in a sample of repetitively traumatised victims. According to Exner (1995), if the HVI is positive, it indicates that the participant tends to display behaviours that exhibit a guardedness or constant preparedness that is based on a general mistrust of the general environment. In addition, participants tend to behave in a cautious, suspicious manner and may experience feelings of vulnerability. In Levin's (in Wilson & Keane, 1997)

RIM research on trauma participants, hypervigilance indices were positive and perseveration scores elevated, which provide “a picture of psychological preparedness, guardedness and preoccupation with traumatic themes” (p.534). These results are thus dissimilar to the findings of the current study. In the current study’s sample group one would expect such victims of repetitive and multiple trauma, to exhibit signs of hypervigilance. The fact that these victims have been traumatised repetitively in the same location and still have to return there, provides even more justification for expecting such a finding. It appears that this feature is absent in victims of this type of chronic trauma. A possible hypothesis is that the psychological strain of being on constant ‘alert’, subsequent to this type of chronic victimisation, leads to participants experiencing distorted perceptual functioning and reality testing, as suggested by the findings reported elsewhere in this study. The reason for this could be that the psychological effort and energy required to prevent becoming overly guarded and paranoid, in turn results in such emotional overload that their thinking processes and reality testing become detrimentally impacted.

## **6.5 Response Styles**

According to Exner (1993), response styles as indicated by the EB, suggest a fairly permanent psychological feature of a participant. However, it is important to note, not only in general but also with particular relevance to this study, that Exner believed that certain circumstances could result in either a temporary or even permanent change in a participant’s response style. In specific, Exner states that a participant’s preferred style may alter due to abnormal, continual and chronically stressful conditions.

### **6.5.1 Results of response styles and Lambda**

As stated in Chapter 5, more than half of the participants in this study (53%) presented with excessively high or low Lambda scores. A high Lambda is, according to Exner (1993), an economical and less demanding way of dealing with stimulus

demands. It can also be a defensive mechanism adopted by an individual when psychological capacities have been strained to a maximum. The participant thus defensively protects the self by avoiding or limiting what is taken in from incoming stimulus fields. The high Lambda scores taken together with the fact that the majority (73%) of the participants in this study present with impaired perceptual functioning, suggest that this economical approach may be more intentional. As stated by Exner, high Lambda scores together with mediational problems, are often due to a participant experiencing the environment as unsafe and threatening. For this reason, they attempt to distance themselves from their environments as much as possible. One possible assumption for the high Lambda scores amongst this sample group, is that these participants may already be psychologically overtaxed. Participants may adopt this avoidant approach as a response style, due to an unconscious realisation that further psychological strain cannot be sustained. In order to protect themselves and cope with the continual demands of daily life, they may thus need to minimise or deny the incoming stimulus information.

While 33% of the participants were described solely as having Avoidant styles ( $L > .99$ ), another 2 participants (13%) with indistinguishable styles, and 5 (33%) participants with Introversive styles, the remaining three obtained avoidant ambivalent, introversive and extratensive styles, respectively. Thus, in total 47% of the sample present with Avoidant styles. This finding does not correspond with previous RIM research conducted, wherein the dominant style that featured amongst trauma victims was an ambivalent style. Wilson and Keane (1997) include the results of Harman et al., who found that 50% of his study's participants were ambivalent, Levin's study which found 47% to be ambivalent, and Kaser-Boyd who found that the majority of the participants in his study presented with an ambivalent style. In contrast, only 1 (7%) participant in the current study presented as ambivalent and is described as having an avoidant style together with this.

One possible hypothesis for the absence of Ambivalent styles in this study's sample Group, when compared to previous research participants, is the repetitive nature of the trauma. It is a possibility that the repetitive and multiple nature of these armed robberies, the trauma of returning to the location of the trauma daily, as well as the high probability of repeat attacks, have resulted in a change in response style. Exner (1993) noted that permanent or transient changes in preferred response styles can occur in the face of continual and chronically stressful life circumstances. Therefore, the high percentage of Ambivalent response styles found in previous studies as compared to the one percent in the current study, may be due to the chronic nature of this type of repetitive and multiple trauma. The response styles of the participants may have presented as Ambivalent subsequent to a once-off trauma or more than one single trauma, but has now changed due to the chronicity of this type of trauma.

## **6.6 Additional similarities and differences between the current and previous studies**

Similar findings to those concluded in the current study, have been found in previous RIM research in terms of the Affective ratio and inanimate movement (m) variables.

### **6.6.1 Affective ratio**

Nine (60%) participants presented with Affective ratios (Afr) that were significantly below the average and 3 (20%), had ratios that were well above the average range. Thus, in total, 12 participants (80%) failed to present with Afr within the acceptable range, while only 3 (20%) participants were within the normal range. The interpretative finding in respect of low Afr is, according to Exner (1993), that these participants will tend to avoid emotional contexts and also tend to experience significant discomfort with affect. This may in turn result in social withdrawal and even complete social withdrawal. In considering these results with the type of trauma being discussed in this

study, the researcher is of the opinion that the findings may again be related to the chronicity of such trauma. As stated by Exner (1993), there is a connection between avoiding emotional stimuli and issues of control. It is possible that the only way these participants can cope with the repetitive and multiple trauma in their place of work, is to deny or avoid their own feelings as well as any other form of emotional stimuli. If the participants in this study were to allow full impact of their emotions to emerge, they could experience significant loss of control. In addition, it is highly likely that these participants have never permitted themselves to fully experience and express the emotions felt during and subsequent to each trauma. There could, therefore, also be an element of unconscious fears involved in avoiding emotional stimuli. The reason for this could be that emotional stimuli serves as a trigger to offset the emotions that these participants have successfully managed to deny. This denial of affect may also be linked to learned social and male cultures. As suggested previously in the study, male socialisation has, over the years, often encouraged males to have an aversion towards emotions. The idea that has been upheld is that to be emotional is to lose one's manhood. If 'old' emotions (such as those linked to the traumas) were allowed to surface and be witnessed by others, these participants may fear being perceived as emasculate. These participants could also have an awareness on some level, that if the full impact of their emotions were to be unmasked, they could become totally overwhelmed or even incapacitated by their own vulnerability and powerlessness, leaving them feeling helpless. Therefore, to unconsciously defend and protect against the loss of control (albeit these controls are already under duress as suggested by the results of the D and Adj D Scores), participants may cut themselves off from their emotional selves. This serves to ensure that they continue with their daily functioning in a manner which they perceive as normal.

The Afr findings appear to present similarly to that of previous RIM research

findings. As previously referred to, Allen's (1994) article includes the results of Swanson et al., Sloane, Levin and Hartman et al., whose research results concluded that trauma victims presented with low Afr's. To compare, the mean Afr obtained in the current study was 0.48. As can be seen from the figures detailed below, this figure is quite similar to the results obtained in the above researchers' studies. The mean Afr. for each of the above three researchers is as follows:

**Table 11: Mean Affective Ratio Scores obtained in previous research studies**

Researcher	Year of study	Afr. – Mean Score
Swanson et al.	1990	0.49
Hartman et al.	1990	0.45
Levin	1993	0.45
Current study	2004	0.48

Research studies detailed by Wilson and Keane (1997) also found similar findings in terms of low Afr's. These include Kaser Boyd's research study in 1993, an additional study by Levin in 1994 and Souffrant's study in 1987.

### 6.6.2 Elevated Inanimate Movement (m)

As elaborated by Wilson and Keane (1997), an elevated inanimate movement score (m) indicates feelings of helplessness and anxiety. It also suggests experiencing perceived threats in the environment, as well as a lack of control over events.

Elevations in this variable relate to situational stress and can have a significant impact on a participant's thinking or emotions, or both. This variable is considered together with the SumY score, and includes reviewing the differences between the D and Adj D Scores. According to Exner (1993), when the value for (m) or the value for SumY is three times greater than the other, it indicates the presence of situational stress. In addition, it suggests that the participant is unable to integrate intrusive recollections

and indicates psychological numbing due to high levels of situational stress. The (m) variable is stated as being significantly elevated in other RIM research studies on trauma victims (Van der Kolk & Ducey in Allen, 1994; Souffrant in Wilson & Keane, 1997; Hartman et al. & Levin in Allen, 1994; Swanson et al. in Allen, 1994; Sloan, Arsenault, Hilsenroth, Harvill & Handler in Wilson & Keane, 1997), although specific figures are not provided. In the current study, however, the mean score of inanimate movements was 2.00.

This mean score does not indicate a significant elevation and, therefore, appears to be dissimilar to the findings of the earlier studies mentioned above. Only 33% of the participants ( $N=5$ ) in the current study present with noticeably elevated (m) scores. This suggests that approximately one third of the sample group are currently experiencing high levels of situational stress in their lives.

A lack of situational stress presentation may be one of the distinguishing features of this type of repetitive and multiple trauma when contrasted with other types of trauma. In other words, the repetitive and ongoing nature of the trauma in the workplace, as well as having to return to the scene of the trauma daily, may require that participants engage in different ways of coping. Participants may engage in the use of different defence mechanisms, such as suppression or denial, to enable them to cope with this type of trauma. When the (m) variable is elevated it indicates that participants are emotionally overwhelmed and experience high levels of helplessness and vulnerability. These participants may shut down or disallow such emotional reactions. However, in doing so, it could contribute towards the severe distortions and impairment in their thinking processes. To elaborate upon the latter point, the mean score for the X- % variable in the current study is significantly lower the mean scores that were obtained for this variable in other studies on trauma (see Table 12). As explained by Exner (1993), inaccurate perceptions indicate a participants' inability to accurately translate what is perceived in terms of themselves and their world around them. This often



results in poor judgement and a failure to make accurate as well as realistic assessments regarding personal experiences. This inability in terms of accurate translation, may result from the large amounts of energy expended in the process of denial, used to ward off the unwanted emotions of helplessness and vulnerability that are fostered by such traumatic experiences.

### **6.6.3 A qualitative similarity between this study and previous RIM research**

This study is a quantitative one and therefore will not include qualitative features of the research. However, one qualitative feature that is similar to that of a previous study is briefly mentioned, as it appeared frequently in the responses of the current study's sample group. The feature that was noted in the research conducted by Salley and Teiling (in Wilson & Keane, 1997) was an overabundance of divider themes in the content of their participants' responses. These themes included underground explosions. Their explanation for such responses amongst the participants is that they indicate efforts made by the participants to dissociate, or ward off specific parts of their inner experiences. In addition, "there were preoccupations with morbid objects (e.g. wounded people, body parts and blood, particularly on the chromatic cards" (p. 532). The content of the current study's responses also found a large amount of references to explosions, volcanic eruptions and rockets, as well as similar morbid objects such as blood, body parts and wounded people. This may serve as an interesting aspect to investigate in another, more qualitative research study.

**Table 12: Comparison between previous research and findings of the current study**

Mean scores of variables	Levin, 1994	Swanson et al., 1990	Current Research
Lambda	0.53	1.28	0.95
X+%	0.59	0.46	0.37
Afr	0.45	0.49	0.48
X-%	0.15	0.29	0.50
D Score	-1.42	-1.82	-0.80
Adj D Score	-0.14	-0.82	-0.07
WsumC	4.14	2.79	1.73
Wsum6	4.33	6.56	12.40
FABCOM	0.52	0.56	0.40
Ambitent	48%	-----	7%

### 6.7 Contrasting X-% between the current study and previous research studies

In reviewing the results obtained between the current study and Levin and Swanson's (see Table 12 above) in terms of the X-%, a significant variance is noted. The participants in the current study present as markedly more disturbed subsequent to repetitive and multiple trauma than other types of trauma. In other words, in comparison to the results of this previous research, it appears that this type of trauma results in more severe perceptual distortions than that which results from exposure to single, more than one unrelated, or even repeated exposure traumas in war contexts. This may be due to the ongoing or high probability of repeat exposure to trauma. Alternatively, it may be due to the fact that victims have to constantly return and remain, for the majority of their day, in the same location where all the traumas transpired, namely in the workplace.

### 6.8 General discussion of the total results obtained from the study

From the results it would appear that these participants are coping outwardly, despite the severity of impairment in reality testing which would be considered to be quite debilitating

for most individuals. The impression gained by the researcher, as well as what was verbally conveyed by the participants themselves, is that they are not significantly impacted by the traumas sustained. The majority of the participants confirmed this in the individual interviews, reporting that although the experiences were significant, they were continuing with their daily functioning in the absence of any noteworthy effects. Personal interactions and observations made by the researcher over a period of time of victims of this type of trauma, do not appear to accord with the participants' reports of not being affected. Despite claims of continued effective functioning, and accepting that these victims do appear to be coping within their work environments, manifestations of negative effects in other areas of their lives may be presenting themselves. In specific, problems may appear to be more within the interpersonal relationship domains where only significant others can provide confirmation of this. Additionally, as stated in an earlier part of the study, these outward impressions of coping appear to be contradicted by members within the community with whom the researcher has interacted. Contradictory reports, as well as the researcher's own personal observations, include 'out of character' behaviours. Descriptions provided by certain members of the community include statements to the effect that these participants are experiencing a 'second childhood', 'a mid-life crisis', or in general appear to have undergone a personality change. Mood swings, nervousness, agitation, sleep disturbances, abdominal complaints, binge drinking, overall dissatisfaction and apathy with life, as well as panic reactions, are some of the symptoms described.

## CHAPTER 7

### CONCLUSION AND RECOMMENDATIONS

In the concluding discussion regarding the results of this research, it is important to highlight the relevance of avoiding reductionistic views on the effects of trauma. Within the field of psychology, there is an awareness of the fact that “trauma never happens in a social and cultural vacuum, nor can the effects of trauma be relegated to the psychology or biology of an individual” (Shalev et al., 2000, p. 439). Thus, with this in mind, it should be noted that some of the researcher’s speculations and reasoning, in respect of these findings, are offered tentatively.

Before exploring the implications and limitations of the results of this study, it is important to reiterate the original aims and objectives of the research, as well as reflect upon some pertinent aspects of the literature review. In the literature review, a reference was made to the fact that reality is a subjective phenomenon. Reality is thus unique to each participant and is perceived in accordance with each individual’s personal experiences, own set of beliefs, assumptions of the world and lens through which they choose to view them. However, while it is accepted that reality is subjective, it is simultaneously consensual. Consensual reality is formulated in accordance with the prevailing societal norms, views and agreement in terms of a wide spectrum of objects, events, people, beliefs, ideals, cultures, meanings and perceptions. Thus consensual reality refers to the idea that the majority perceive, process and conceptualise events in a similar manner. In concluding this study it would appear that it is this feature, of interpreting reality appropriately and typically, that is now distorted amongst the sample group described. The word ‘norms’ has been used above and by definition, implies the idea of ‘normalcy’. For the most part, when life follows its normal course, normal human cognitions, emotions and behavioural manifestations are to be expected. Therefore, one should no longer hold expectations of normal reactions amongst victims who have had to contend with abnormal events. Rather than viewing

trauma as a problem, it could be seen as a normal outcome subsequent to an abnormal event. As stated by Summerfield (1997), trauma is a label that is applied to an experience that should actually be considered to be a normal reaction. Having said this, and, given the repetitive and multiple nature of the trauma described in this study, perhaps it should be viewed as normal for participants to display such severe distortions in perceptual functioning.

In reviewing the hypothesis outlined at the inception of this research, it would appear that it holds some merit, as the majority of the participants (73%) assessed, were found to process their reality in an atypical manner. To reiterate, the researcher hypothesised, that when participants are repetitively traumatised due to crime in the workplace, and have to return to this place of employ daily, the victims process their realities and perceive their worlds in an atypical manner. This may be due, not only to the traumatic experience of the event, the repetitive experience of attacks and having to return to the scene of the trauma daily, but also to the ongoing threat of repeat victimisation.

It stands to reason that if the place where an individual spends the majority of their waking hours is also the location where repeated traumatising has occurred, it surely becomes extremely psychologically taxing on the victim. As stated in the literature review, an individual is not biologically or psychologically built to sustain such overwhelming cognitive and emotional strain. In the words of Shalev et al. (2000), it is possible that one of the most significant discoveries in studying trauma, “is that the human brain and body can suffer only so much without severely reorganising one’s internal capacity for adaptation” (p. 439).

Naturally, an individual’s capacity to tolerate this degree of stress directly influences their ability to function effectively. It is at this point that attention should be directed to the fact that to all intents and purposes, these 15 participants appear and verbally affirm that they are functioning effectively. The RIM results however, describe this sample group as experiencing perceptual

distortions (PTI > 3 in 73% of participants) to the extent that functional daily living is expected to be severely and detrimentally affected. According to the RIM test results, the area in which participants have been the most significantly impacted, is in the area of cognitive functioning. One idea is that these victims have had to change their way of perceiving, processing and conceptualising, in order to continue functioning optimally in their daily lives.

Although the researcher was unable to source any replicate research or literature on this particular type of repetitive trauma, the current study's findings appear to concur with the results obtained in RIM research on other types of trauma victims (Van der Kolk & Ducey in Allen, 1994; Souffrant in Wilson & Keane, 1997; Hartman et al. and Levin in Allen, 1994; Swanson et al. in Allen, 1994; Sloan et al. in Wilson & Keane, 1997). Despite the fact that the types of trauma investigated by these researchers were different to that of this study, it was concluded that their participants also presented with distorted thinking processes and reality testing.

An important feature, which has recently begun to attract more research attention, is that of psychotic features amongst trauma victims or participants diagnosed with PTSD. As stated by Hyer et al. in Allen et al. (1994), the high F responding in RIM protocols, correlates with indications of PTSD pathology. The high Lambda scores obtained by the participants in the current study concurs with this statement made by Hyer.

A specific difference was noted between this study and previous studies in terms of controls and stress tolerance as well as perceptual thinking processes. Although all the previous studies indicate that participants present with problems in this area, the current study found that the D Score figures were not as significant, when compared to these earlier RIM research findings. While there were more problems in terms of controls and stress tolerance amongst participants of previous studies, the current study found that their sample group displayed more severity in the area of perceptual functioning. To elaborate, previous research also concluded that victims

presented with distorted perceptions and impaired reality testing. However, the current study's scores for the various mediation and ideation variables showed significant differences between them. The differences indicate that the severity of the perceptual disturbances in this study's sample group, are much more severe and debilitating when compared to other research studies, as referred to previously. It is relevant to note that although the previous studies focused on trauma populations, both the chronicity as well as the type of traumas differed to that of the sample group described in the current study. Similar results of avoidance of emotional stimuli (low Afr's) were concluded in both the present and earlier studies, with the latter concluding that the majority of their participants also presented with Ambivalent response styles. In contrast, this study suggested that the majority of participants made use of an avoidant style, which may be one of the ways in which they cope with their overwhelming psychological strain. This avoidance style may also serve as an explanation for the variances noted between earlier studies and the current research's D Scores. To elaborate, participants could be managing their controls and stress tolerance capacities by defensively avoiding incoming stimuli. In effect, they are using denial as a defence mechanism. This in turn could be overtaxing their psychological resources by negatively impacting their cognitive processing, which was found to be more detrimentally affected than that of participants evaluated in previous studies.

The specific method selected in conducting the research is also significant, in that this psychometric test may serve useful in assessing trauma populations. The Rorschach test which has in the past predominantly served as an indicator of psychosis within the schizophrenic spectrum of disorders, now appears to suggest that psychotic features also present within at least one additional population, namely that of trauma victims. The more information gained in this area, the more valuable it will become in terms of avoiding misdiagnosis. As previously mentioned, Alao et al. (2003) highlights the fact that sufferers of PTSD were often misdiagnosed with schizophrenia due to psychotic symptom presentations.

Furthermore, an important question which could be forthcoming from the current study, is whether or not perceptual disturbances, impaired reality testing or other psychotic type features should be included as additional symptoms for the criteria of the PTSD diagnosis (chronic type). As discussed by Alao et al. (2003), the criteria for PTSD within the DSM-IV-TR does not include psychotic symptoms, nor does it include the diagnostic category of complex PTSD as proposed by Judith Herman (in Whealin, 2004). As stated in this article by Whealin (2004), the DSM-IV-TR's diagnosis of PTSD often fails to fully encompass the extreme psychological harm that results from repeated and ongoing trauma.

Van der Kolk et al. (1996) has made similar comments and suggestions regarding the absence of certain symptoms of PTSD within the DSM-IV-TR criteria, which he finds are prevalent in chronically traumatised population groups. "Identifying and classifying psychotic symptoms in PTSD may be significant for treatment purposes" (Alao et al., 2003, p.24).

As concluded by Alao et al. (2003) there is a need for additional studies to explore the correlation between PTSD and psychotic symptoms. This has according to them, important implications regarding diagnosis, treatment and prognosis. An additional as well as important aspect to hold in mind, is in respect of the number of individuals in the population who may be experiencing such trauma. As indicated, the participants in the current study never reported or sought assistance from professionals within the medical field. Thus, it is highly likely (and this was confirmed in the literature review), that there are many cases that go unreported, leaving a question mark in terms of the number of persons who may be experiencing similar symptoms.

In closing, it may be viable for further researchers to explore this type of trauma victim using the same quantitative approach, in order to gain more insight into the impact which it has on participants. A more in-depth study on this trauma population could provide more understanding in terms of the possible reasons for the differences in reactions amongst victims, as well as further



validate the similarities found. Alternatively, it could be interesting to explore the same type of victims using a qualitative approach, which may bring to light other valuable information.

There is clearly no doubt that any new information and additional insights regarding the effects of trauma, serve to assist both the field of psychology, as well as the professionals within it, to facilitate more effective healing processes.

Although the study yielded some valuable and interesting insight into this sample group of trauma victims, it does however, have limitations. These would include the representativeness of the sample size, which is too small to make a generalisation in terms of the impact of repetitive and multiple trauma victims. Individual differences are a vital consideration in any study of human behaviour. Together with this, the premorbid level of functioning of individuals is an important factor when assessing the impact of any event upon human functioning and behaviour. Despite this, the researcher concludes that further studies of this nature may validate these findings further and assist in increased understanding of this type of trauma population group.

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**APPENDIX A**

**INVITATION FOR SAMPLES PARTICIPATION**

My name is Julie D.M. E'Silva. I am currently completing my Master's Degree in Clinical Psychology. As part of the course requirements, I am conducting a research endeavour for which a research document shall be produced. In order for the research to be effectively carried out, the project requires a sample of persons who are willing to participate. Your willingness to be included as a participant would serve invaluable in understanding the effects of crime and victimisation, within the context of South Africa.

The nature and purpose of the research, is to evaluate the context of the life of the individual, who has been held up in an armed robbery in his or her place of employment. An additional criterion is that you must have experienced this at least two (2) times or more and still have to return to the same workplace each day, where the incidents occurred.

I shall require you to participate in one interview as well as be administered with one projective test, namely the Rorschach Inkblot Method. It is my clear and unequivocal undertaking to assure you that all information and data gleaned for the purposes of this study, will be kept confidential, including that of your identity . The interview itself should take no longer than one and a half hours and the researcher is willing to administer the test in the location of the participant's choice.

It is envisaged that the information generated from these two methods of data collection, will serve to provide insight into multiple trauma in the workplace in South Africa, which has a large likelihood of recurring . In gaining such insight, the information can assist in formulating an understanding of how to assist persons who have been victimised repetitively.

The research dissertation is proposed to be completed by the end of August, 2003, and therefore interviews are to be conducted as soon as possible after availing yourself of your time. Should you be interested in making a valuable contribution to the field of Clinical Psychology research, please contact the undersigned at your earliest convenience, at any one of the numbers provided.

Thanking you for affording the time to peruse the content of this invitation. In anticipation of your favourable response, I remain,

Yours sincerely

JULIE E'SILVA

INTERN CLINICAL PSYCHOLOGIST

UNIVERSITY OF PRETORIA / WESKOPPIES PSYCHIATRIC HOSPITAL

**CONTACT DETAILS:** (011) 452-0416 OR (011) 452-4945 OR CELL: 0832280623

**APPENDIX B**

**UNIVERSITY OF PRETORIA**

**ONE TO ONE CONSENT FORM**

My name is Julie D.M. E'Silva. I am currently completing my Master's Degree in Clinical Psychology. As part of the course requirements, I am conducting a research endeavour for which a research document shall be produced. Your willingness to be included as a participant in this investigation is valued and much appreciated.

The purpose of the research is to evaluate the context of the life of the individual, who has been held up in an armed robbery in his or her place of employment. An additional criterion is that you must have experienced this at least two (2) times or more and still have to return to the same workplace each day, where the incidents occurred.

I shall require you to participate in one interview as well as be administered with one projective test, namely the Rorschach Inkblot Method. It is my clear and unequivocal undertaking to assure you that all information and data gleaned for the purposes of this study, will be kept confidential, including that of your identity.

It is envisaged that the information generated from these two methods of data collection, will serve to provide insight into multiple trauma in the workplace in South Africa, which has a large likelihood of recurring.

Should you, subsequent to the interview and completion of the test, require additional information or assistance in relation to this topic, please feel free to contact me on 0832280623 during office hours. Furthermore, should you be interested in the end results of the study and wish to receive information on the outcomes, please call the same number to confirm this.

I \_\_\_\_\_(name in full) hereby agree to my voluntary participation in this research project and I understand that I am under no obligations whatsoever to any parties concerned herewith.

Signed by \_\_\_\_\_ on this day the \_\_\_\_\_ of \_\_\_\_\_ 20\_\_\_\_ in \_\_\_\_\_.

As witnesses: 1 \_\_\_\_\_ 2. \_\_\_\_\_

All information detailed herein will be kept in the strictest confidence

## APPENDIX C

### INDIVIDUAL INTERVIEW SCHEDULE

Date of Interview : \_\_\_\_\_

#### BIOGRAPHICAL DETAILS

Name : \_\_\_\_\_ Gender: \_\_\_\_\_ Age: \_\_\_\_\_

Date of Birth: \_\_\_\_\_ Nationality: \_\_\_\_\_

Socio-economic Status: \_\_\_\_\_ Occupation: \_\_\_\_\_

Marital Status: \_\_\_\_\_ Dependants: \_\_\_\_\_

Religion: \_\_\_\_\_ Race: \_\_\_\_\_ Highest Level of Education: \_\_\_\_\_

Self-Employed or Employed: \_\_\_\_\_ Business Location: \_\_\_\_\_ High risk area? \_\_\_\_\_

Type of Business: \_\_\_\_\_ Working hours: \_\_\_\_\_

#### INCIDENT ENQUIRY

1. How many times...held up? \_\_\_\_\_ All in same place of employ? \_\_\_\_\_

2. Do you feel it could happen again? \_\_\_\_\_ If yes, how does this make you feel? \_\_\_\_\_

3. Where you or any other employee physically harmed in any way during the armed robbery? If so, If so, please elaborate. \_\_\_\_\_

4. Did you feel you were going to die during any of the robberies? \_\_\_\_\_ Does the thought of death or dying, often enter your thoughts? \_\_\_\_\_ If so, how often \_\_\_\_\_ Do these thoughts create fear or anxiety? \_\_\_\_\_

5. Did you seek professional assistance or receive trauma counselling after any of the attacks? \_\_\_\_\_ Why? \_\_\_\_\_

6. How long ago did the last robbery occur? \_\_\_\_\_

7. What is the period between each separate robbery \_\_\_\_\_

8. What time of day did first robbery occur? \_\_\_\_\_

Date and time of 1<sup>st</sup> robbery: \_\_\_\_\_

Date and time of 2<sup>nd</sup> robbery \_\_\_\_\_ 3<sup>rd</sup> robbery \_\_\_\_\_

9. Do you experience any physical or psychological reaction at work at these times a day? Please elaborate. \_\_\_\_\_

10. Did you feel supported by your family and friends after each robbery? \_\_\_\_\_

11. Do you feel it is important to talk about these events or do you prefer to keep most of it to yourself? \_\_\_\_\_

12. Do you feel that your psychological and physical reaction were different after each robbery?

13. Do you feel that your view of life changed at all after the robberies? \_\_\_\_\_

14. If so, can you explain. \_\_\_\_\_

15. In your daily functioning in your place of employ, subsequent to these hold-ups, do you experience feelings



of helplessness or powerlessness? \_\_\_\_\_

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16. Did you have good security measures in place? \_\_\_\_\_

17. If not, did you take any new security measures after the 1<sup>st</sup> attack? \_\_\_\_\_ The 2<sup>nd</sup> attack?  
\_\_\_\_\_ The 3<sup>rd</sup> attack

18. Do you feel that the police force provide you with protection? \_\_\_\_\_ Please give the reasons for your  
answer. \_\_\_\_\_

19. Do you feel your attitude to life is the same as it was before you were ever held up? \_\_\_\_\_

20. Do you feel the meaning you have about life in general has changed? Please elaborate. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

21. Can you give me a brief summary of how each of the robberies took place and how it was for you? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### **MEDICAL ENQUIRY**

1. Are you currently on any type of medication for stress, depression, or anxiety? \_\_\_\_\_

\_\_\_\_\_ Please detail: \_\_\_\_\_

a. Did you start taking medication subsequent to the robberies or were you already taking medication?  
\_\_\_\_\_

b. Are you currently seeing a medical practitioner or receiving psychotherapy or any other type of therapy?  
\_\_\_\_\_  
\_\_\_\_\_

2. Has your eating or sleeping patterns changed since these robberies? \_\_\_\_\_

3. If so, how have they changed? \_\_\_\_\_

4. Do you feel that your moods/emotions have changed since the attacks? If so, can you elaborate on this. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Have you had or do you currently have panic or anxiety attacks subsequent to the robberies? \_\_\_\_\_  
\_\_\_\_\_

6. If so, did they only start after you had been repetitively victimised? \_\_\_\_\_

7. Do you smoke cigarettes, drink alcohol or ingest other substances? \_\_\_\_\_

8. Can you give details \_\_\_\_\_

9. Do you find your intake of these has increased or decreased since the attacks? \_\_\_\_\_ Can you  
elaborate? \_\_\_\_\_

10. Do you feel closer or more distant from your family since experiencing these hold-ups? \_\_\_\_\_  
\_\_\_\_\_

12. In general do you feel you are coping well. \_\_\_\_\_

Can you elaborate on this? \_\_\_\_\_

11. Do you feel frustrated or content that family, friends, associates and professionals within the field of psychology understand what you have been through? \_\_\_\_\_

12. Would you say that you are still affected by these robberies? \_\_\_\_\_ If so, can you expand on your answer. \_\_\_\_\_