EVALUATION OF THE CONTINUOUS

STRESS INTERVENTION PROGRAMME ON TRAUMA

SYMPTOMS AND COPING RESPONSES

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DECLARATION

I declare that this thesis, unless specifically indicated to the contrary, is my own original work with approval from my supervisor B. Killian. It has not been submitted before any degree or examination at any other university.

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ABSTRACT

The present study evaluated the effect of the Continuous Stress Intervention Programme (CSIP) on trauma symptoms and coping strategies. The programme was implemented with a group of police officers from a specialised unit who daily experience extremely difficult and at times traumatic work conditions. Data was gathered before and after the implementation of the CSIP. A quasi - experimental design approach was adopted with a control group who had no intervention and an intervention - experimental group, who participated in the programme.

Data was gathered from questionnaires with instruments that measured trauma symptomatology and coping strategies, both in the pre - and post - intervention periods. The control group consisted of eight police officers, while the experimental group consisted of 24 police officers. Data was analysed using a frequency count of scores, and a mixed between - within analysis of variance, using the SPSS (Version 11) statistical computer package.

The results of the study showed that the Continuous Stress Intervention Programme did not have a significant effect between the experimental and control groups, on trauma symptoms, but the trauma symptoms of the experimental group decreased from the pre - assessment to the post - assessment at a greater rate. In addition, in terms of the coping responses, the results of the study were significant for only one of the sub - scales, between the experimental and control groups, while there was an increase in positive coping strategies for the experimental group.

The results were discussed in terms of epidemiological studies conducted previously in the area of trauma research. Recommendations were made pertaining to the inclusion of support mechanisms for the spouses of police officers, as well as the inclusion of coping strategies to deal with specific organisational problems within the programme.

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LIST OF ABBREVIATIONS AND ACRONYMS

ANOVA	- Analysis of variance
APA	- American Psychiatric Association
CISD	- Critical Incident Stress Debriefing
CRI - A	- Coping Response Inventory - Adult
CSIP	- Continuous Stress Intervention Programme
DSM I	- Diagnostic and Statistical Manual - first edition
DSM II	- Diagnostic and Statistical Manual - second edition
DSM III	- Diagnostic and Statistical Manual - third edition
DSM IV	- Diagnostic and Statistical Manual - fourth edition
DSM IV - TR	- Diagnostic and Statistical Manual - fourth edition - text revision
EMDR	- Eye movement desensitisation and reprocessing
IES - R	- Impact of Event Scale - Revised
PsySSA	- Psychological Society of South Africa
PTSD	- Post traumatic stress disorder
SAPS	- South African Police Service
SRRS	- Social Readjustment Rating Scale
TSC - 40	- Trauma Symptom Checklist - 40

CHAPTER 1: OVERVIEW

This study evaluated the effect of the Continuous Stress Intervention Programme (CSIP), (South African Police Service (SAPS), 2000) on police officers who need to cope with trauma. The purpose of the programme is to provide support for police officers working in high stress units. It is conducted in confidential, voluntary group sessions. The programme is offered to the high stress units through a marketing presentation of its purpose and benefits.

A trained trauma debriefer and a co - debriefer facilitates approximately ten to twelve sessions with a group of eight to twelve members. The programme is developed fundamentally to foster the development of a supportive relationship between the facilitators and the group members. This supportive relationship operates at two levels. Firstly, it provides psychological support for the members of the group to help them deal with situations that they find traumatic. It also provides trauma counselling to help traumatised individuals deal with the symptoms associated with traumatising incidents. Secondly, the relationship is educative because the facilitators incorporate psycho - education in the group sessions in which positive coping mechanisms are discussed for dealing with stress in general and traumatic incidents in particular.

Ideally, the programme is conducted with individuals from the same unit, in order to facilitate the development of a support network within the working environment. To this end, the policy of buddy support is promoted.

The aims of the CSIP are both to reduce the trauma symptoms and to instil positive coping mechanisms for dealing with stress and trauma. The programme takes cognisance that the members of the group might have been exposed to traumatic situations in the past, and could possibly be exposed to traumatic situations in the future. As the risk of exposure to trauma does not dissipate for the members of these units, the programme needs to offer ways of ensuring continuous, sustainable support. This requirement is addressed by the facilitating and multiplying

of positive coping strategies to improve the functioning of the group members in all aspects of their lives.

To understand the effects of trauma, it is important to consider both the historical and the contemporary concepts of the phenomenon. Chapter 2 of the study consists of a review of the history of trauma, starting with post traumatic stress disorder (PTSD). This discussion of the development in the theoretical understanding of PTSD is essential for an appreciation of the contemporary definition. However, even the contemporary definition is not uncontested. It is further elaborated in the discussion of continuous traumatic stress. This discussion stresses the importance of acknowledging the complexity of PTSD for an understanding of the intervention strategies for PTSD sufferers.

The CSIP also emphasises the development of positive coping strategies. Chapter 3, therefore, reviews the various approaches to the treatment of PTSD. The chapter commences by probing the field of psychological debriefing, or Critical Incident Stress Debriefing (CISD), one of the coping strategies for containing the effects of trauma and preventing the onset of PTSD. The model of CISD discussed is also the model upon which the CSIP is founded.

An important aspect of this chapter is a review of the long term effects of trauma. Discussion of these is essential for understanding the importance of early intervention in the treatment of trauma symptoms. The effects of trauma occur at several levels. The multiple, many - levelled effects of trauma are reviewed, since there are individual variations in the experience. The chapter concludes with reviews of both individual and group therapy modalities in the treatment of PTSD. Contemporary treatment modalities for PTSD sufferers include individual and group therapies. Although both modalities constitute effective interventions for PTSD sufferers, group interventions have more often been utilised because they are more cost effective.

Chapter 4 deals with the police officers as frontline emergency personnel in terms of the prevalence of stress and trauma in their lives as a consequence of the stressful and traumatic nature of their occupation. The chapter acknowledges that the police environment is exceedingly stressful and advocates the importance of the development and administering of support programmes that address the psychological, social and organisational needs of the policemen. Contemporary research on how police officers cope with the environment to which they are uniquely subjected is, thus, reviewed. It is also important for the purposes of this study to establish if the environment of emergency personnel is as traumatic as suggested by Straker (1987), Herman (1992, in Friedland, 1999) or Eagle (1994). This discussion is pertinent for establishing if the environment of emergency personnel is more traumatic than that of personnel in other situations. If this is established to be the case, the need for intervention strategies that reduce trauma symptoms and increase positive coping methods will be affirmed and, the urgency of implementing programmes like the CSIP which aim to address the symptomatolgy and coping strategies will be substantiated.

Chapter 5 discusses the CSIP. It begins with an exploration of the theoretical foundation of the programme that is evaluated in this study. The chapter also reviews the components of the individual sessions of the programme and compares the CSIP with other theoretical modalities of group intervention for PTSD sufferers. The chapter concludes with a discussion of the environment of the emergency personnel who were researched in this study, and considers the duties that this unit performs as part of the wider services of the SAPS. The sample base of this study is a specialised unit in the SAPS. The chapter, therefore, includes a discussion of this unit. To endorse the need for an implementation of the CSIP in this unit it is essential to have at least a rudimentary understanding of the kind of work done by the employees of this unit.

Chapter 6 discusses the methodology of the study. The research design, research question, sampling method, and instruments employed in the study are described.

Chapter 7 contains all the statistical analyses of the instruments utilised in the study, including a presentation of the reliability of each scale used as measurement implements for the pre - and post - assessment periods for the four instruments of the questionnaire. The results were further analysed in testing for significant differences between the responses for each instrument from the pre - to the post - assessment period.

Chapter 8 is the discussion chapter in which the results based on epidemiological studies previously conducted in the area are reviewed. The chapter includes an account of the research objectives of this study, and the extent to which they were realised. The limitations of the study are then discussed. The chapter concludes with recommendations in the light of the findings.

Chapter 9 is the concluding chapter which highlights the major findings of this study.

CHAPTER 2: TRAUMA

2.1 Introduction

The study of trauma as a focus for theory and research has grown enormously since the early 1980's. Research interest has increased tenfold with the advent of the Gulf Wars and the bombing of the Twin Towers on September 11, 2002. This chapter gives a brief historical survey of the approach to trauma and examines contemporary approaches. Defining trauma and PTSD is integrally important to this research. This chapter, therefore, discusses PTSD also in its aspect as continuous trauma and the effects of exposure to it.

2.2 Historical Perspective of Post Traumatic Stress Disorder

The notion that extreme events evoke extreme reactions is ancient. According to Trimble (1985, in Scott & Strading, 1992) in Homer's Odyssey, warriors' diaries revealed gruelling accounts of intense panic and disturbance both during and after battlefield encounters. Even as far back as 2000 BC, the Sumerians "told of anguish and suffering among the population" after the destruction of Nippur (Kinzie & Goetz, 1996, p.160, in Friedland, 1999). The first theoretical discussion of a post - traumatic syndrome in the medical community was traced to the work of Erichsen, (no date), entitled "On the Concussion of the Spine: Nervous Shock and Other Obscure Injuries of the Nervous System in their Clinical and Medico-legal Aspects" (Trimble, 1981, in Peterson, Prout & Schwartz, 1991, p.4). The work expressed the important idea that relatively mild trauma could cause serious impairment in functioning. The etiology was hypothesised to be neurological (Peterson *et al.*, 1991). Previously, the etiology of shell shock was thought to be the effect of changes in atmospheric pressure or of an excess of carbon monoxide as a result of battle (Trimble, 1985 in Peterson *et al.*, 1991). At the turn of the 19th century, hysteria became the main explanatory principle for traumatic reactions (Peterson *et al.*, 1991). An important shift came with the early analytic writers. Peterson *et al.* (1991) maintain that the analytical writers emphasized

the significance of "psychological trauma" as opposed to psychological reactions to a physical trauma. They stressed that it was the over - excitation of the drives of the individual that was traumatic. The over stimulation, supposedly, led to a disturbance of the psychic equilibrium (Feniches, 1946, in Peterson *et al.*, 1991). In the early twentieth century, trauma-related disorders in analytic writings were referred to as the psychoneuroses of individuals and their drives (Peterson *et al.*, 1991). Traumatic neurosis was viewed as the ego's inability to master the degree of the trauma that resulted in the disorganization of ego functioning (Kardiner, 1941, in Peterson *et al.*, 1991).

Many early psychiatrists understood trauma to be the ultimate source of psychopathology (van der Kolk, 1987). Freud initially regarded many psychiatric problems as manifestations of early childhood traumas (van der Kolk, 1987). For example, he interpreted the cognitive, emotional and behavioural symptoms of hysterical patients as symbolic repetitions of early traumatic events (van der Kolk, 1987). He did, however, later come to the belief that the development of neurosis was more closely related to childhood fantasies and misinterpretations of childhood events (van der Kolk, 1987). The study of trauma has been characterised by "episodic amnesia": periods of intensive investigation have alternated with "periods of oblivion" (Herman, 1992, p.7, in Friedland, 1999).

Historically, only during and after major warfare has post traumatic stress disorder been studied extensively (Kolb, 1993, in Friedland, 1999). Scott and Strading (1992, p.2) confirmed this when they observed that the two world wars had introduced a variety of synonyms for traumatic stress such as "shell shock, war neurosis, combat exhaustion and fight fatigue". They add, however, that it was the study of non - combatant populations such as survivors of fire (Cobb & Lindemann, 1943), explosions (Leopold & Dillon, 1963), flood (Titchener & Kapp, 1976) and concentration camps (Traulman, 1964) that showed that these victims experienced similar symptoms. This has led to the suggestion that there is a single post traumatic stress syndrome - a common pathway which may be reached through exposure to a wide variety of relatively severe stressors (Scott &

Strading, 1992). In 1980, the American Psychiatric Association (APA) endorsed this notion by defining post traumatic stress disorder in the Diagnostic and Statistical Manual of mental disorders - third edition (DSM-III), (Scott & Strading, 1992).

The notion that exposure to traumatic events affects one's mental well being was also acknowledged in the Diagnostic and Statistical Manual of mental disorders - first edition (DSM - I) and the Diagnostic and Statistical Manual of mental disorders - second edition (DSM II). The DSM - I, which was published after World II, not only recognised traumatic neurosis but provided for two subtypes of this disorder (APA, 1952, in Friedland, 1999). In the publication of the DSM - I, the broad category of 'gross stress reaction' was recognised (APA, 1952, in Friedland, 1999). However, following a sixteen - year lull in American war activity, DSM - II (1968) dropped the earlier categorisation and replaced it with a vague reference to "adjustment reactions of adult life" (Figley, 1978; Kleber & Brom, 1992, in Esprey, 1996). It was alleged by various researchers that the case of traumatic stress was ignored as long as it did not have an obvious effect on the military competency of soldiers engaged in warfare (Kardiner, 1941; Herman, 1992; Kleber & Brom, 1992, in Esprey, 1996). The Vietnam War reignited interest in the effects of trauma when hundreds of veterans were severely traumatised by their experiences of combat. The existence of PTSD was finally legitimised in the DSM - III (1980) when it was classified as a "separate diagnostic entity" categorised among the anxiety disorders (Wilson, 1994, p.691, in Friedland, 1999).

2.3 Defining Trauma

The word *trauma* originated from the Greek language, and originally meant, " to wound or to penetrate" (van Houten, 2002, p.1). It is not easily definable as a concept in the field of psychology, despite it's having been the focus of much theoretical and empirical investigation (Kleber & Brom, 1992; Green, 1990; Kasl, 1990; Brett, 1993a; Finley, 1985, in Esprey, 1996). The ambiguity surrounding the concept was addressed by Kasl's explanation that the term

"trauma" can be used as an exposure (stimulus), as an outcome (reaction) or as a process linking one to the other (1990 in Esprey, 1996).

The Diagnostic and Statistical Manual of mental disorders - fourth edition (DSM - IV), (APA, 1994) likewise defines trauma as both a stimulus and a response. In viewing trauma as a stimulus, the DSM - IV (APA, 1994, p.424), describes the essential feature of post traumatic stress disorder as the development of certain symptoms following:

> "exposure to an extreme traumatic stressor involving direct personal experiences of a threatened serious injury, or threat to one's physical integrity, or witnessing an event that involves death, injury, or a threat to the physical integrity of another person, or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate."

This understanding is preserved in the definition in DSM - IV - TR (2000, in Kaplan & Saddock, 2003, p.626). Criterion A requires that:

> "The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self and others"

Finley (1985, in Friedman, 1999) also defines a traumatic event as a stressor. He describes it as an "extraordinary event or series of events which is sudden, overwhelming, and is often dangerous, either to one's self or significant others " (Finley, 1985, p. xviii, in Friedman, 1999). A significant difference between the DSM - IV's (APA, 1994) view of trauma as a stimulus, and Finley's (1985, in Friedman, 1999) idea of trauma as a stimulus is that Finley (1985, in Friedman, 1999) views trauma specifically as an extraordinary event. However, the DSM - IV's and the DSM - IV - TR's criterion of PTSD is that it accentuates the subjectivity of trauma by defining a traumatic event in terms of an individual's appraisal of that event as personally threatening. This indicates that the DSM - IV (APA, 1994) and the DSM - IV - TR (2000, in Kaplan & Saddock, 2003) has acknowledged that there is no uniform approach to defining a traumatic event, although the nature of the stimulus event has been more specifically defined. The DSM - IV (APA, 1994) and DSM - IV - TR (2000, in Kaplan & Saddock, 2003) has shifted the emphasis away from the

objective severity of the stressor to a combination of the objective severity of the stressor, an individual's vulnerability to a traumatic stressor, and the individual's subjective perception of the stressor.

It is important to acknowledge that what some people may find traumatic may not be perceived as such by others. This means that an event "cannot objectively be defined as traumatic unless it is subjectively perceived as such" (Esprey, 1996, p. 22), a view supported by Krystal (1971, p.11., in Esprey, 1996) and summarised as follows: "psychic trauma is always a complex reaction...initiated by the psychic reality - that is, the individual experience, interpreted, as it were, by the association it provokes...stimuli are traumatic not by the virtue of their physical intensity, but by their meaning and the effects they evoke". Janoff-Bulman (1992, p.52, in Friedman, 1999) agrees when he argues that, in the experience of trauma, an appraisal process always takes place, and it is "how an event is understood that ultimately determines whether it will be traumatic or not".

Trauma is also construed as a response, as the second requirement for Criterion A for the diagnosis of PTSD in the DSM - IV (1994, p.424) and the DSM - IV - TR (2000, in Kaplan & Saddock, 2003, p.626) is that "the person's response involves intense fear, helplessness, or horror".

The DSM - IV (1994) and DSM - IV - TR (2000, in Kaplan & Saddock, 2003) outlines characteristic responses to trauma, as intrusive thoughts about the traumatic experience, avoidance and numbing reactions, and increased physiological arousal when confronted with reminders of the traumatic experience. The responses to traumatic events occur at several levels, as is indicated by the following discussion of PTSD. Following the above discussion of trauma, it is apparent that, although the concept of trauma has been found difficult to define, it is defined in the DSM - IV and DSM - IV - TR as a stimulus and a response. This definition acknowledges an

important aspect of the process of traumatisation, as the subjective perception of individuals thus accounting for the variability in the effects of traumatic experiences.

2.4 Post Traumatic Stress Disorder

In defining trauma, the criterion for PTSD has been touched on, but it will now be explored in greater detail. The DSM-IV-TR 's (2000, in Kaplan & Saddock, 2003, p. 626) diagnostic criteria for PTSD are:

> **Criterion A.** The person has been exposed to a traumatic event in which both of the following were present: (1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others
>
> (2) the person's response involved intense fear, helplessness, or horror.
>
> **Criterion B.** The traumatic event is persistently re-experienced in one (or more) of the following ways:
>
> (1) recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions
>
> (2) recurrent distressing dreams of the event
>
> (3) acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated).
>
> (4) intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
>
> (5) physiological reactivity on exposure to internal and external cues that symbolize or resemble an aspect of the traumatic event
>
> **Criterion C.** Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:
>
> (1) efforts to avoid thoughts, feelings, or conversations associated with the trauma
>
> (2) efforts to avoid activities, places, or people that arouse recollections of the trauma
>
> (3) inability to recall an important aspect of the trauma
>
> (4) markedly diminished interest or participation in significant activities
>
> (5)feeling of detachment or estrangement from others

(6) restricted range of affect (e.g., unable to have loving feelings)

(7) sense of foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)

Criterion D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:

(1) difficulty falling or staying asleep

(2) irritability or outbursts of anger

(3) difficulty concentrating

(4) hypervigilance

(5) exaggerated startle response

Criterion E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.

Criterion F. The disturbances causes clinically significant distress or impairment in social, occupational, or other important area of functioning.

The DSM - IV - TR (2000, in Kaplan & Saddock, 2003, p. 626) also specifies that if the above symptoms occur for less than one month, the appropriate diagnosis may be acute stress disorder. While the symptoms are similar to those identified for PTSD, an additional criterion has been included for acute stress disorder:

> "Either while experiencing or after experiencing the distressing event, the individual has three (or more) of the following dissociative symptoms: (1) a subjective sense of numbing, detachment, or absence of emotional responsiveness; (2) a reduction in awareness of his or her surroundings (e.g., being in a daze); (3) de - realization; (4) de - personalization; (5) dissociative amnesia (i.e., inability to recall an important aspect of the trauma)."

Kaplan and Saddock (2003) maintain that PTSD usually develops some time after the trauma. They estimate that the delay of symptoms can be as short as one week or as long as 30 years. Symptoms may also fluctuate over time and may be more pronounced during intense periods of stress. According to Kaplan and Saddock (2003), even if untreated, about 50 percent of patients diagnosed with PTSD tend to recover after about a year.

It is significant that a person's subjective experience of an event is of paramount importance in determining the onset of PTSD. Kaplan and Saddock (2003) assert that, although the *stressor* is the prime causative factor in the development of PTSD, not everyone develops the disorder after experiencing a traumatic event. This signifies that the stressor alone does not suffice as a cause of the disorder. Other aspects that need to be considered include, individual pre - existing biological and psychosocial factors and events that occurred before and after the event (Kaplan & Saddock, 2003).

From a review of the literature by Scott and Strading (1992) it appears that, whether a person remains distressed after a major trauma appears to depend on three vulnerability and two protective features. The *Vulnerability* features are: (1) high levels of stress; (2) pre-existing personality or emotional disorder; and (3) family history of psychiatric disorder; and the *Protection features* are: (4) adaptive coping style and (5) effective social support.

Exposure to a current trauma (e.g., a terrorist attack or a disaster) may activate memories of previous traumas (e.g., abuse, rape or combat), (Brier, 2002), and the individual may experience symptoms related to both events. This leads to the question of what happens to those individuals who are exposed to traumatic events repeatedly? Do these individuals experience symptoms associated with all of the traumatic events to which they were subjected? Or are these individuals subjected to a selective array of symptoms depending on other factors like the timing of the incidents, the duration of the incident itself, occurrences both before and after the incidents – factors which have previously been discussed? Another possibility is that these individuals become numb to further traumatic events. This symptom of trauma was described by Borysenko (2002) as constriction. It refers to the narrowing of life that results from trauma, where the emotions are dulled and the person creates an altered sense of reality for the sake of emotional safety.

2.5 Continuous Traumatic Stress

According to Freud (1953, in Wynchank, 2000, p.8), "external and internal, real and instinctual dangers converge" in a traumatic situation. What are the implications of this when one is exposed to pervasive and unrelenting violence and trauma? Does the person have to continuously attend to this convergence in realities as Freud implies? Alternatively, does the person develop a strategy either to defend against this frightening reality or to integrate this experience?

Terr (1991, in Wynchank, 2000) conducted research with children and distinguished between two basic types of trauma. Type I, is characterised by a single sudden exposure to overwhelming trauma, while Type II is characterised by sustained exposure to repeated stressors. Both types of trauma are prevalent in South Africa with its exorbitant crime rates and violence.

The term *Continuous Traumatic Stress Syndrome* was coined by Straker (1987) in response to the chronic trauma and violence in South Africa. She claimed that PTSD is a misnomer in the South African context of civil violence and upheaval. Somasundaram and Sivayokon (1994, in Esprey, 1996), argue that, although Straker (1987) introduced the term "continuous traumatic stress" (CTS), it represents a concept which appeared as early as 1956 when Kris (1956, in Niederland, 1971, in Esprey, 1996), and later Sandler (1967, in Niederland, 1971, in Esprey, 1996), spoke of "chronic stress trauma". They recognised chronic traumatic stress in individuals who had been subjected to prolonged day - to - day stress, as opposed to "acute shock trauma" which refers to suddenly overwhelming stimuli. It has been argued by Herman (1993, in Friedman, 1999) that there is a wide spectrum of post-traumatic stress disorders. Friedman (1999) maintains that continuous traumatic stress forms an important part of this continuum, and Herman (1993, in Friedman, 1999) argued for the inclusion of a category - Disorders Of Extreme Stress Not Otherwise Specified (DESNOS). While the DSM - IV - TR (2000, in Kaplan & Saddock, 2003) does not acknowledge this category, an alternative formulation of continuous traumatic stress belongs to the DSM - IV - TR's diagnosis of PTSD. According to the DSM - IV -TR (2000, in

Kaplan & Saddock, 2003, p.626), in order to diagnose post traumatic stress disorder, a person must have been exposed to a traumatic event in which, "the person experienced, witnessed, or was confronted with an event or **events** that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others".

The DSM - IV - TR, therefore, acknowledges continuous traumatic stress. However, the DSM - IV - TR does not discuss (CTS), or differentiate it from PTSD as Straker (1987). In formulating the term, CTS, Straker (1987) intimates that a person diagnosed with continuous traumatic stress may experience symptoms different from those of someone diagnosed with PTSD. However, Simpson (1993, in Esprey, 1996) claims that no research findings suggest that continuous exposure constitutes a different syndrome with different pathology or features. Instead, Simpson argues that it is more likely that there are some differences in the formulation of the stress syndrome following continuous exposure.

In contrast, Herman (1992, p. 215 in Friedman, 1999) encouraged the inclusion of a category of continuous trauma in the DSM's conceptualisation of trauma, as she believed that the definition did not capture the exposure of individuals to "prolonged, repeated interpersonal violence or victimisation". An exploration of prolonged captivity, which is a type of continuous trauma according to Herman (1993, in Friedman, 1999), discovered that people subjected to prolonged, repeated traumas develop an insidious, progressive form of PTSD. It appears that continuous traumatisation exaggerates the symptomatolgy of PTSD. The form of traumatisation to which Herman (1992; 1993, in Friedman, 1999) refers is present in cases of prolonged captivity and torture, and may not be directly applicable to an understanding of the complex trauma to which police officials are exposed. However, Herman's (1992; 1993, in Friedman, 1999) notion of complex post - traumatic stress disorder has certainly created opportunities to explore this more complex concept of trauma.

The long term neuropsychological consequence of prolonged torture was studied by Somnier and Genefke (1986, in Esprey, 1996) amongst three different groups of torture victims. They discovered that the victims had: (1) sleep disturbances attributable to recurring nightmares about the torture experiences; (2) psychosomatic symptoms, particularly headaches; (3) memory failure around details of the torture; (4) impaired concentration; (5) fatigue; and (6) a high incidence of anxiety provoked by conscious memories of the events, as well as by sensory, auditory, or visual experiences which symbolised the torture. A study examining the long term coping in the face of continuous trauma by some of the Holocaust victims was conducted by Kahana, Kahana, Harel, and Rosner (1988, in Friedland, 1999). They identified five characteristics of ongoing, extreme stress. These included: (1) the disruption of total life experience; (2) perception of the environment as extremely hostile and dangerous; (3) severe limitation of opportunities to remove the environmental stressors; (4) no predictable end to the experience; and (5) the apparent meaninglessness of the suffering associated with the experience. In addition, Kahana *et al.*, (1988, in Friedman, 1999) studied the above conditions in the specific context of concentration camps. They ascertained that the most common coping strategies applied in the hostile environment fell into at least two experiential phases. The initial phase is characterized by shock or disbelief, and evokes defences that protect the individual by blocking out the enormity of the situation (Kahana *et al.*, 1988; Lifton, 1968, in Friedman, 1999). The second phase elicits more diverse responses, and may include emotional numbing, denial, detachment, and regression (Herman, 1992, Kahana *et al.*, 1988, Lifton, 1968 in Friedman, 1999).

Although the symptoms would appear to concur with those associated with PTSD, it appears likely, taking into consideration Herman's (1992, 1993, in Friedman, 1999) and Straker's (1987) notions of a complex or continuous trauma, that these symptoms might occur with greater intensity. The symptoms could vary in intensity and progression because of the nature of the traumatic incidents. Kolb (1989, in Esprey, 1996) accepted the idea of the heterogeneity of PTSD and suggested a spectrum of post traumatic stress responses rather than a single stress response.

The concept of varied traumas was also explored by Eagle (1994) who places it in the category of complicated traumatic stress and distinguishes three main types: repetitive trauma, prolonged trauma and multiple trauma. The categories are not mutually exclusive. These will be explored in more detail.

Repetitive or recurrent trauma, according to Eagle (1994), refers to the situation in which individuals are exposed to the same kind of stressor on different occasions over time. Each occurrence of the traumatic stressor constitutes a traumatic experience, but circumstances may prevent individuals' leaving the situation and result in their experiencing repetitive victimization (Esprey, 1994). The situation of battered women may exemplify this. This type of trauma, argues Eagle (1994), prevents the abatement of symptoms associated with the trauma, as the trauma symptoms are likely to reemerge following each incident.

Prolonged traumatic stress is suffered by survivors of trauma who have been subjected to an extended period of threat lasting from a few hours to years (Eagle, 1994). An example of this type of trauma described by Eagle (1994) is provided by the situation of the political detainees and political prisoners in South Africa. Herman (1992; 1993, in Friedland, 1999) discusses persons in captivity, and Kahana *et al.* (1988, in Friedland, 1999) discuss the Holocaust victims, who also exemplify prolonged trauma. This type of exposure to continuous trauma may result in profound changes in identity, in dissociative features, somatic complaints, and, often, depression. The essential feature of prolonged traumatic stress is that the changes are severe, pervasive, and, often, enduring (Herman, 1992; 1993; Kahana *et al.*, 1998, in Friedland, 1999).

Multiple stressors occur in situations such as ongoing civil conflict or political repression (Eagle, 1994). The essential feature of this type of trauma is that persons may be subjected to unpredictable traumatic events. This type of environment was compared with the environment described by Straker (1987), in which there is continuous traumatic stress (Eagle, 1994). Individuals living in such environments are subjected to ongoing threat of trauma and may

experience unrelated traumatic events (Eagle, 1994). In situations of multiple and on-going trauma, the symptom of hyper-arousal is likely to be intensified, and survivors may become hypervigilant (Eagle, 1994). This may result in startle responses, sleeplessness, and concentration problems. These symptoms concur with the DSM's (Kaplan and Saddock, 2003, p.626) description of increased arousal as a criterion of PTSD. Increased arousal could include: (a) difficulty falling or staying asleep; (b) difficulty in concentrating, or exaggerated startle response (DSM - IV - TR, 2000, in Kaplan & Saddock, 2003). A study by Sorenson and Golding (1990, in Friedland, 1999) of depressive sequelae, following criminal victimization, concludes that multiple criminal victimization increases the risk both of depression and suicide. Eagle (1994, p.15) suggests that the symptoms of increased arousal may be maintained only for a limited period, as more chronic depressive symptoms "of numbing, depressed mood, withdrawal and hopelessness may develop".

2.6 Conclusion

This chapter discusses and highlights the current definition of PTSD and emphasises the need for an expansion of the current definition. The chapter also explores Eagle's (1994), Herman's (1992; 1993, in Friedland) and Kolb's (1989) proposals for a recognition of the complexity of PTSD in situations of on - going trauma. An important aspect to be considered in this study is whether the context in which frontline emergency personnel function is related to any of the situations of complex or continuous trauma described in this chapter. This will be explored further in Chapter 4. An understanding of how individuals cope with exposure to traumatic situations forms an essential component of the programme for facilitating positive coping strategies for dealing with trauma symptoms.

CHAPTER 3: COPING WITH TRAUMA

3.1 Introduction

This chapter discusses coping with trauma. Firstly, the long term effects of trauma, begun in the previous chapter's discussion of continuous trauma, will be explored. The long term effects of trauma are emphasized to throw light on the need to treat persons afflicted with PTSD symptoms. The chapter will also discuss Mitchell's model of psychological debriefing as the programme evaluated in this research study, is based on his model. Therapy, crucial for the successful management of any psychological illness, is available only to a few people. The chapter will explore the contemporary treatment strategies in the treatment of PTSD and the efficacy of various individual therapies. It will also consider the various theoretical frameworks underlying the group treatment of PTSD.

3.2. Psychological Debriefing - Mitchell's Model

Critical Incident Stress Debriefing (CISD), according to Canterbury and Yule (1999), is among the debriefing procedures most frequently described in the literature. They claim that it was originally developed by Mitchell (1983, in Canterbury & Yule, 1999) for use with emergency service personnel, but the model has since been adapted for use with other groups exposed to trauma. CISD should be used in the context of a comprehensive traumatic stress management programme, which includes pre - incident education on the causes, effects and management of stress; on - scene support services; individual consultations; follow - up services; and family support services (Mitchell, 1983, in Canterbury & Yule, 1999).

Trauma debriefing usually takes place shortly after exposure to a traumatic event. It is a group procedure involving individuals exposed to the same traumatic event (Canterbury & Yule, 1999). The debriefing process includes a sharing of the factual information and the accompanying

cognitions and emotions surrounding the event. It also provides an opportunity to learn from others and cognitively to reframe the experience (Canterbury & Yule, 1999). CISD also facilitates psychological "closure" after the traumatic or critical incident, (ie. the facilitation of the reconstruction process), (Everly & Mitchell, 2000). When closure is not possible, the CISD may serve as a useful mechanism for psychological triage so as to identify those who will need more advanced care. The most current CISD model of psychological debriefing covers seven stages or phases (Everly & Mitchell, 2000). The CISD takes about one and a half to three hours and is conducted two to fourteen days after a critical incident.

The issue of the effectiveness of crisis intervention first emerged in the clinical literature in the 1960's (Everly & Mitchell, 2000). A study by Artiss (1963, in Everly & Mitchell, 2000) reported that the psychotherapeutic elements of immediacy, proximity, and expectation had been employed successfully in military psychiatry to reduce psychiatric morbidity and increase return-to combat rates for American soldiers. This was confirmed by Solomon and Benbenishty (1986, in Everly & Mitchell, 2000) in their study of Israeli soldiers. These authors established that early intervention, proximal intervention, and the role of expectation were associated with positive outcomes. Parad and Parad (1968, in Everly & Mitchell, 2000) studied 1,656 cases of social workers and found crisis-oriented intervention to be effective in reducing florid psychiatric complaints and in improving patients' ability to cope with stress.

In support of debriefings, but specifically of the CISD model of group psychological crisis intervention, Everly and Mitchell (2000) cited several studies. The studies they cited are: on emergency medical services personnel (Robinson & Mitchell, 1993; 1995); on rescue personnel in the wake of the sinking of the ship Estonia (Nurmi,1999); on emergency medical technicians following the Los Angeles riots (Wee, Mills & Koelher,1999); on police (Bohl, 1991); and on emergency medical personnel in the wake of a mass shooting (Jenkins, 1996). These studies offer varying degrees of evidence for the effectiveness of the CISD intervention.

A descriptive study of 172 emergency services, welfare and hospital personnel who had participated in 31 debriefings was reported by Robinson and Mitchell (1993, in Canterbury & Yule, 1999). Participants were asked to complete an evaluation questionnaire two weeks post debriefing. The study showed that most of the respondents rated the debriefings as valuable, and those who experienced stress at the time of the incident attributed a reduction in symptoms, at least in part, to the debriefing. Aspects of the debriefing most commonly described as helpful included talking about the incident, improved self-understanding and improved between-agency cohesion. It should be noted however, that those who responded to the study represent only 61% of the total number of participants in the 31 debriefings (Canterbury & Yule, 1999). It is possible that those who found the debriefing less beneficial were also less likely to respond.

Macfarlane (1988, in Canterbury & Yule, 1999) conducted a study of fire fighters involved in the Ash Wednesday bushfires in Australia and found that those who received debriefing shortly after the incident were less likely to develop acute post-traumatic stress symptoms. He, however also found that those who developed delayed onset post traumatic stress reactions were more likely to have attended a debriefing than those who did not. This could mean that traumatic symptoms do not dissipate after a psychological debriefing but are procrastinated. Shalev (1994, in Stephens, 2002) claims that, although psychological debriefing has theoretical rationale and strong support from many practitioners, much of the support is anecdotal, and that further empirical study is needed to examine the immediate and long - term effects of such interventions. Following this, it would be appropriate to explore the current criticisms of psychological debriefing.

3.3. A critique of psychological debriefing

Bisson and Deahl (1994, in Stephens, 2002) called for more rigorous evaluative research before debriefing is offered. The previously discussed research was also deficient at certain levels. Robert and Mitchell's research (1993, in Canterbury & Yule, 1999) was carried out with only 61% of the participants who had been debriefed. This raises questions about the efficacy of the

results. Did the 39% not respond because they did not have a positive experience with psychological debriefing? Macfarlane (1988, in Canterbury & Yule, 1999) also discovered that individuals who developed delayed onset traumatic stress symptoms were more likely to have attended debriefing sessions. Bisson and Deahl (1994, in Stephens, 2002) maintain that studies supporting the effectiveness of early psychological intervention, have been compromised for at least one of the following reasons: they assessed only the subjective, immediate reactions of participants and no long term outcomes; there were no control groups; or their results were thrown in doubt by contradictory findings.

The effectiveness of stress debriefings for 62 participants who were debriefed, compared with 133 who were not debriefed after an earthquake in New Castle, Australia, was assessed by Kenardy, Webster, Lewin, Carr, Hazell and Carter (1996, in Everly & Mitchell, 2000). These researchers discovered that the debriefed group did not show significantly different symptoms from those of the group who had not been debriefed. Even Bisson, Jenkins, Alexander and Bannister (1997) conducted an assessment to verify the benefits of psychological debriefing. In their study, they randomly assigned 110 patients with severe burns to either a "debriefing" group or a control group. They discovered that the debriefed group had more severe traumatic stress scores after 13 months. This suggests that there are serious doubts about the benefits of debriefings. A random trial of debriefings for 106 motor vehicle accident victims was conducted by Hobbs, Mayou, Harrison, and Warlock (1996). In the study, 54 of the victims underwent debriefing, while the 52 who did not, formed the control group. It was discovered that the individuals receiving the debriefings had higher traumatic stress scores at follow-up.

Various studies on the benefits of debriefing have been discussed, specifically the CISD model of debriefing. A number of studies have also been indicated which deny that there is proof of the effectiveness of debriefing. The influx of research on trauma has further complicated the debate on the effectiveness of debriefing. Current research indicates that single - session psychological debriefing of all trauma exposed individuals generally is not beneficial (Briere, 2002). Instead, it

suggests that treatment should be offered only when indicated by the presentation of trauma symptoms; multiple sessions are recommended, ideally with several visits over a one to two month period (Brier, 2002). In view of the resources and training being devoted to debriefing there is obviously a need for more systematic evaluation of the procedure – especially in the form of random controlled trials. Canterbury and Yule (1999) argue that before embarking on such trials, it is necessary to consider what is meant by psychological debriefing and whether standardised procedures can be meaningfully applied across a range of trauma situations. They maintain that it is reasonable to expect that the needs of victims of a large-scale disaster are different from those of workers involved in rescue operations. Similarly, the needs of those involved in single traumatic events are likely to be different from those involved in prolonged traumatic situations (Canterbury & Yule, 1999). Trauma debriefing is useful, but, on its own, it is not a panacea for all psychological injuries (van Houten, 2002). Trauma debriefing, according to van Houten (2002), should be implemented by skilled counsellors in conjunction with other ongoing counselling methods. This was echoed by Mitchell (1983); Canterbury and Yule (1999) as well as by Brier (2002) who advocated a comprehensive intervention strategy over a period, as opposed to a once - off trauma debriefing session.

3.4. Long term effects of trauma

In the early accounts of "railroad spine" (Veith, 1965, in van der Kolk, 1987, p.63) and the investigations of "shell shock" (Southard, 1919, in van der Kolk, 1987, p. 63) in World War 1, the lasting effects of trauma have been ascribed to physiological or neuro-anatomical changes. Even Freud (1959, in van der Kolk, 1987) considered a biological explanation for traumatic neuroses when he hypothesised that a feeling of helplessness is caused when the "stimulus barrier" is breached as excitation floods the mental apparatus.

Investigations conducted by Pavlov (1927, in van der Kolk, 1987) continued the tradition of explaining the trauma response as being the result of lasting physiological changes. Many studies

have shown how the response to potent environmental stimuli (unconditional stimuli) becomes a conditioned reaction (van der Kolk, 1987). After repeated aversive stimulation, intrinsically non - threatening cues associated with the trauma (conditioned stimuli) became capable of eliciting the defensive reaction by themselves (conditioned responses), (van der Kolk, 1987). Consequently, it can be said that a war veteran may respond to conditioned stimuli, such as the sound of gunshot from a passing helicopter, as if he or she were in a combat situation. Individual differences in temperament accounted for the variability in the human response to traumatic stimuli (Pavlov, 1927, in van der Kolk, 1987). This concept characterises individually different reactions to trauma, discussed in the previous chapter.

A variety of symptoms that commonly occur are considered to be independent of the symptoms following a traumatic event (Schiraldi, 1989). These symptoms are: (1) self-recrimination, (2) shattered assumptions and (3) mood disturbances. Self - recrimination refers to the shame and guilt that traumatised people often feel, whether they are responsible for the event or not. According to Schiraldi (1989) guilt can be adaptive if it is realistic and if it leads to improvements in our behaviour or character. However, self - condemnation, as unprocessed guilt and shame, is destructive and will impede recovery. The concept of shattered assumptions according to Schiraldi (1989) is based on the premise that each of us holds basic assumptions that give order to our chaotic world and makes stress bearable. Some researchers have indicated that PTSD occurs through the shattering of these assumptions, which are views of self, world and other people (Schiraldi, 1989). This suggests that, before the trauma or traumas, the individual had positive views of self, world and other people, and that these change as a result of the traumatic event or events. Mood disturbances, depression and anxiety have been identified as common features associated with PTSD (Schiraldi, 1989). Depression follows from lowered self-esteem, hopelessness, shame, loss, feeling permanently damaged and pessimism (Schiraldi, 1989). Victims of trauma might be at risk of suicide unless such thoughts and feelings are resolved. Anxiety is related to hostility, which is an attitude of dislike and distrust of others. It might show as

irritability, rage or angry outbursts against those who did not go through the trauma and cannot understand it (Schiraldi, 1989).

A ten-year follow-up of miners trapped underground for two weeks was carried out by Ploeger (1977, in Spielberger & Sarason, 1977). The 11 miners in the village of Lengede in North Germany were rescued after a difficult operation. During that time, the miners were exposed to extreme psychic and physical traumas. Ploeger (1997, in Spielberger & Sarason, 1977) discovered that nine of the ten miners who were questioned showed an irritable explosive change of personality. In six of the miners, phobic states were induced by situations resembling the threat of the mine disaster. These personality changes and phobias persisted in most cases to the same degree as at the time of their rescue (Ploeger, 1977, in Spielberger & Sarason, 1977). The miners also experienced troublesome, pressing memories and nightmares.

The long term effects of exposure to traumatic events may include any of the following changes: (1) in personality traits (e.g., lack of confidence, inhibitions, increased risk taking, disruptions in moral beliefs or development); (2) disturbances in interpersonal functioning (e.g., loss of friends, irritability/bullying, withdrawal); (3) cognitive dysfunction (e.g., memory and concentration problems, inhibited imagination, primitive thinking and processing); (4) mental health disturbances (e.g. chronic and/or complicated PTSD, substance related disorders, conduct, mood, anxiety, somatoform, eating, sleep, impulse control, personality, and/or dissociative disorders); (5) attempts at numbing the emotions (e.g., through drug abuse, alcoholism, overuse of medication, excessive sleeping); (6) compulsive repetition of traumatic behaviours and sequences (e.g., molested victims engaging in acts of promiscuity, victims of burial under debris squeezing into small spaces; (7) attempts at self punishment or warding off (e.g., self mutilation and other rituals, placing themselves in punishing circumstances, scratching at the sites of physical wounds or symbolic locations); and (8) repetitive somatic complaints or general ill health (e.g., shaking, headaches, stomach aches, immune deficiency) (Nader, 1996, 1997, 2001; Nader & Fairbanks, 1994; Nader & Pynoos, 1993; Garbarino, Kostelny & Dubrow, 1991; Terr, 1991; van der Kolk &

Sparta, 1991; Herman, Perry & van der Kolk, 1989, Pynoos & Nader, 1988 in Nader, 2002, p.10-11). Failure to resolve moderate to severe traumatic reactions may result in long term consequences that interfere with the ability to engage, over time, in productive behaviours and to function adequately socially, academically, professionally and personally (Wilson & Raphael, 1993, in Nader, 2002). Unresolved traumatic exposure may perpetuate violent acts resulting in trauma for others (Nader, 2002; Admundson, 1993, in Nader, 2002).

Psychological growth effectively stops when PTSD takes over (Borysenko, 2002). The sense of self is so damaged that relationships with others suffer, and true intimacy becomes virtually impossible (Borysenko, 2002). The effects of trauma appear to be so devastating that researchers globally have been struggling to find the best treatment.

3.5. Contemporary interventions in the treatment of PTSD

Until the 1960s and the 1970s, and the Vietnam War, the treatment of trauma was limited (van Houten, 2002). Before the Vietnam war, individuals who manifested post traumatic symptoms were treated, at worst, as if they were predisposed to psychotic disorders, and, at best, as if there was nothing that could be done for them (van Houten, 2002). During the Vietnam War, the first systematic attempt at treating traumatised soldiers began, and it involved removing the soldiers from the battle scene and then allowing them to speak about whatever parts of the traumatic event they wished to share. This initiated the process of crisis counselling and remained dominant until the 1980s when many new trauma models were developed.

"Coping is a stabilising factor that can help individuals maintain psychosocial adaptation during stressful periods and it encompasses cognitive and behavioural efforts to reduce or eliminate stressful conditions and associated emotional distress" (Lazarus & Folkman, 1984; Moos & Schaefer, 1993, in Holahan, Moos and Schaefer, 1996, p. 25). Effective clinical interventions for lasting PTSD usually involve a context of safety and support, and cognitive behavioural therapy,

involving accessing traumatic memories by means of visualisation and cognitive restructuring (Brier, 2002). The three primary goals in the treatment of PTSD are: (1) helping the individual regain a sense of competence and self-worth; (2) helping the individual continue with realistic and adaptive actions; and (3) working through reactions to serious life events (Horowitz & Kaltreider, 1979, in Foy, Donahoe, Carrol, Gollers & Reno, 1987, in Michelson & Asher, 1987). Systematic desensitization, flooding, hypnosis, and supportive therapy may be useful in reducing sensitivity to PTSD anxiety provoking stimuli (Frederick, 1984 in Foy *et al.*, 1987 in Michelson & Asher, 1987).

Foy *et al.* (1987, in Michelson & Asher, 1987) maintain that, almost all therapeutic approaches use some form of reviewing and reprocessing of traumatic events. The review process ranges from informal discussions in rap groups, to defusing or psychological first aid to the highly structured, systematic and repetitive procedures of flooding, implosion or systematic desensitisation. Psychodynamically oriented writers (e.g., Horowitz, 1976; Kardiner & Spiegal, 1947) have emphasised the importance of ideational recall and emotional working through traumatic events (Foy *et al.*, 1987 in Michelson & Asher, 1987).

Two main psychotherapeutic approaches may be followed. The first is exposure therapy, and the second is teaching the individual methods of stress management, including relaxation techniques and cognitive approaches to coping with stress. Richards and Lovell (1999) included cognitive restructuring with the two approaches suggested by Kaplan and Saddock (2003), who maintain that the cognitive restructuring process aims to modify dysfunctional thoughts, beliefs and assumptions. Kaplan and Saddock (2003) add that some preliminary data indicate that, although stress management techniques are more rapidly effective than exposure techniques, exposure techniques yield longer-lasting results. They also commented on the relatively novel but effective psychotherapeutic technique of eye movement desensitisation and reprocessing (EMDR) in the treatment of PTSD. In this intervention strategy, the individual focuses on the lateral movement of the clinician's finger while maintaining a mental image of the traumatic event. The general belief is

that symptoms can be relieved as patients work through the trauma experience while in a state of relaxation (Kaplan & Saddock, 2003). Brier (2002) also maintains that, although prolonged exposure techniques may be beneficial for simple/or uncomplicated traumatic stress, graduated/or titrated exposure may be indicated for PTSD that is accompanied by affect regulation problems or significant co-morbidity. He adds that therapeutic activities should not exceed the individual's capacity to tolerate acute distress.

It seems that the optimal therapeutic impact for an individual experiencing PTSD, is acceptance and integration of the traumatic event in a beneficial way. A contemporary trend in the treatment of survivors of trauma is encouraging the development of increased empathy with others experiencing both similar and dissimilar distressing life events, and, subsequently, the establishment of life goals to provide supportive services to other trauma victims. An integral aspect of coping with trauma is improving the individual's coping attitude and skills for meeting subsequent life changes. A combination of cognitive and behavioural approaches may provide the optimal treatment approach (Richards & Lovell, 1999). The exposure therapy is likely to be beneficial for the anxiety-based symptoms of PTSD, while the cognitive therapy is more appropriate for other types of negative emotions.

3.6 Group therapies treating PTSD

Although individual treatment of psychological problems has been the characteristic therapeutic response to patients with PTSD, the emergence of the Vietnam combat veteran's self-help movement and "rap groups" formulated by Shatan (1973) brought into focus the use of group therapy (Petersen *et al.*, 1991). Rap groups typically were leaderless, or were led by peers who viewed their role as one of facilitating honest and open ventilation, rather than of being diagnosticians or psychotherapists (Ford & Stewart, 1999). The rap groups succeeded in providing a sense of homecoming and camaraderie. However, rap groups were not able to resolve the complex and persistent problems of psychosocial readjustment experienced by many Vietnam

veterans (Ford & Stewart, 1999). Psychotherapists were then called in to develop counselling groups that preserved the open, intense and supportive sharing that was provided in rap groups, while also providing frank, therapeutic treatment (Ford & Stewart, 1999).

The value of group programmes in the treatment of trauma has been well established in the literature (Wallis, 2002). Hall and King (1997, in Wallis, 2002) and Herman and Schatzow (1987, in Willis, 2002) in their studies discovered the benefits of group therapy for reducing the sense of isolation and facilitating universality. Group therapy has been discovered to provide the following advantages: (i) the interpersonal nature of group therapy provides an environment where relationship deficits can be worked on; (ii) isolation is reduced with the sense of belonging to a group; (iii) group acceptance can give the freedom to air painful feelings; (iv) trust can develop; and (v) assertiveness and experimentation with new behaviours can be encouraged (DiNunno 2000, in Wallis, 2002). Therapy groups for military veterans with PTSD followed three basic formats (Ford & Stewart, 1997). It included psycho - educational groups that have structured programmes, with didactic aids (e.g., worksheets, audiovisual presentations) and behavioural exercises(e.g., role - play simulations) that teach a defined topic or set of skills (e.g., anger or stress management or social communication) in a time - limited format (e.g., in a series of ten - weekly sessions) (Ford & Stewart, 1997).

A comparative discussion of different theoretical orientations advocating the use of group therapy with patients manifesting PTSD was conducted by Peterson *et al.* (1999). They focussed on four theoretical orientations: (1) Interactive; (2) Cognitive - Behavioural; (3) Psychoanalytic; and (4) Jungian.

The Interactively Oriented Group Therapy followed, in large part, the principles of Yalom (1975 in Peterson *et al.*, 1997). The groups were not insight oriented, but concentrated on catharsis, support, suggestion and interaction among the group members. This type of treatment modality

was refuted earlier when Ford and Stewart (1997) emphasised the importance also of therapeutic treatment.

The Cognitive Behavioural Group Treatment described by Marafiote (1980, in Peterson *et al.*, 1997), draws upon learning theory as a theoretical model of behaviour. The sessions are conducted in eight- to - twelve sessions on a weekly or bi - weekly basis. In order to facilitate the overall functioning and success of the group, Marafiote (1980, in Peterson *et al.*, 1997) encourages attendance at all the sessions; having the group experience positive reinforcing; encouraging comradeship and group cohesiveness; eliciting self-disclosure; and promoting complimentary and supportive statements. The group therapy is conducted in three phases. Phase I is the Orientation and Commitment phase, in which the development of a treatment contract is essential. Phase II is the Assessment, Goal Identification/ Specification phase. The underlying theme in this phase is identifying each member's difficulties, and setting attainable goals that need to be achieved within specific time frames. Phase III involves the techniques and applications to be followed in the group. These include: relaxation training, thought stopping for maladaptive or obsessive thoughts, cognitive restructuring, cognitive rehearsal, contingency contracting, homework and the use of charts, graphs and bibliotherapy for optimum outcomes.

Psychodynamically oriented group psychotherapy was discussed by Frick and Bogart (1982, in Peterson *et al.*, 1997), who contend that a psychoanalytical orientation contributes towards understanding the dynamics within a therapeutic group. Of particular importance in this theoretical framework is the Transference/Countertransference phenomenon. The essential characteristic of the group is that it is a stable, long term therapy group. It is conducted in four phases. Phase I involves the development of group cohesion from session one to session ten. Phase II comprises facilitating catharsis from the second to the sixth month. Phase III involves dealing with the rage against the therapist from the sixth to the eight month. Finally, Phase IV deals with the facing of current realities, a process extending from the eight to the tenth month. Although this type of

group therapy according to Frick and Bogart (1982, in Peterson *et al.*, 1997) would have long term benefits it bodes very poorly in the present era of managed care and limited funding.

The combined Individual and Group therapy orientation was suggested by Brende (1981, in Peterson *et al.*, 1991). He argues for a combination of the two treatment modalities for several reasons: trust cannot be developed solely in the context of group therapy; individual and group therapy combined enhances revivification; individual therapists bring additional support to patients; some patients have difficulty discussing their traumas in individual therapy, and the group therapy can further treatment; group therapies also promote socialisation and the dissolving of mistrust; and, finally, patients who over identify with the other members in the group can benefit from individual therapy. This type of group therapy requires more than two therapists as the members of the group would require individual therapy with a therapist who is not part of the group therapy. The treatment modality, like the Psychodynamic orientation, is a long term process, hence, it does not fulfil the fundamental issue of managed care.

The exploration of the four theoretical orientations of group therapy for PTSD has emphasised the importance of providing support at two levels. Group members need to be provided with the opportunity to express their feelings in the psychological debriefing process, but further intensive therapeutic intervention is required. The Cognitive Behavioural group treatment orientation for PTSD appears to be the most attainable modality. It is conducted in a specified number of sessions, but incorporates aspects both of catharsis and of psycho - education.

3.7. Conclusion

Treatment of PTSD should help individuals regain connection with two aspects of their lives: their sense of self and their relationship with others. Persons, in rediscovering a sense of self, should be able to integrate the experiences before and after the traumatic incidents. In regaining connection to personal, familial, and societal resources they again become members of a safe and supportive

community. Group therapy draws on the combined power of therapeutic guidance and peer relationships to assist each member in reconstructing a personal narrative that replaces trauma and powerlessness with a new sense of personal control and mutual support. It also provides opportunities for interaction with fellow survivors.

CHAPTER 4: STRESS AND TRAUMA IN THE POLICE FORCE

4.1 Introduction

The work of South African police officers is often exhausting, dangerous, stressful and traumatic. They are held responsible for continuing social problems, and are expected to bring about law and order under very difficult conditions. This chapter describes the occupational environment of police officers and reviews the stresses that they experience in their line of duty. It considers how these officers cope both with their daily occupational stresses and with the trauma they are exposed to.

4.2 The prevalence of stress and trauma in employees of the police.

The police are an occupational group at excessive risk of exposure to trauma and the resultant development of PTSD (Violanti, 2001). They are often victims, not only of violence but also of other kinds of disasters (Nel & Burger, 1998). The trauma and daily pressures to which police officers are routinely exposed require an adaptively defensive toughness of attitude, temperament, and training (Miller, 1999). Without this they are unable to do their jobs effectively. Police are involved in situations considered to be critical incident stressors, such as, the serious injury or death of a child or a colleague; the abandonment of small children by their mother; the suicide of a colleague; incidents in which they experience odours such as of decomposing bodies, and the sounds and sights of shooting incidents and bomb blast scenes; environmental dangers; and national disasters – all of these trigger uneasy feelings (Mitchell, 1983, in Dietrich & Hatting, 1993, in Nel & Burger, 1996).

The police force has been defined as an organization with a culture of its own (Marks, 1995; O' Neil, 1996; Nel & Burger, 1998; Engelbrecht, 1999). It is a closed mini - society where officers maintain a strong sense of cohesion, with a code of silence and secrecy, and dependence upon one

another for survival (Wilson, 1973; Skolnick, 1972; Westley, 1970; Neiderhoffer, 1967; Reiss & Bordua, 1967, in Violanti, 1997). This subculture with its hierarchical system provides police officers with: a sense of mission; a combination of suspicion and paranoia; a feeling of their isolation as a community - within - a - community. It is characterised by conservatism, gender - based chauvinism where masculine force is the main problem - solving device, and stereotypical assumptions about race and a tendency, under stress, to resort to dishonest practices (Brogden & Shearing, 1993, in Nel & Burger, 1998).

In his research with American police officers, Brown (1998) discovered that they experienced more stress when their assignments required them to work alone. Moreover, the police culture dictates that they keep their feelings to themselves because they do not want to take the time and energy to explain details to their colleagues, who may have problems of their own (Brown, 1998).

Due to the nature of their work, police officers regularly experience trauma, independently of the routine daily stresses of policing. An investigation into the number of traumatic events experienced by police recruits and serving police showed that field staff reported above average distressing life events and significantly greater than average lifetime exposure to assault, disasters, hazards and motor - vehicle accidents. (Buchanan, Stephens & Long, 2001, in Violanti, 2001). A New Zealand study of 257 police officers showed that the number of traumatic events, experienced either on or off duty, was correlated with PTSD scores and that chronic experience of similar events predicted higher levels of PTSD (Stephens, Long & Miller, 1996, in Buchanan, 2002). Buchanan (2002) specified other research on the police population that revealed that, initial traumatisation increases vulnerability and the risk of developing PTSD after similar, dissimilar or successive future traumatic events. Research has also shown that, when PTSD symptoms are delayed or in remission, psychiatric symptomatolgy may be reactivated by similar traumatic events (Long, Chamberlain & Vincent, 1998, in Buchanan, 2000). This was also cited earlier in a reference to Brier (2002).

In 1987 studies to determine the extent of PTSD in the police were conducted in 1987 among riot police in the Western Cape and the Eastern Cape Provinces, and, in 1988, among African police in Soweto and Pretoria (Nel & Burger, 1998). These studies revealed that 36% of riot police and 41% of African police suffered from PTSD.

It is apparent that police officers, by the nature of their jobs, may be exposed to more stress and trauma in a single day than many people will experience in a very long time, possibly even in their entire life.

4.3. The effects of stress and trauma on the police

The possibility of overexposure to violence and trauma is elevated in South Africa because of our high crime statistics. For some police officers, one of the most difficult tasks is shooting a suspect to protect his or her own life or another's (Nel & Burger, 1998). Psychological reactions such as time distortion, sleep difficulties, fear of legal consequences and emotional reactions like crying may be experienced after such incidents (Stratton, Parker & Snibbe, 1984, in Nel & Burger, 1998).

A study conducted by Engelbrecht (1999) showed a direct relationship between the intensity of occupational tension and stress - related symptoms in police officers. Policemen were also found to be experiencing high levels of burnout which manifested as a diminished sense of personal accomplishment and feelings of negative self-evaluation (O' Neill, 1996). The specific sources of discontent were, "frustrations with an unresponsive police hierarchy, low wages, and disruption of family life caused by overtime and irregular hours" (O' Neill, 1996, p. iv). Further results of the study conducted by O' Neill (1996) revealed that those policemen experiencing the highest frequency of emotional exhaustion and depersonalisation were more likely to bring work related stress home with them in the form of upset and angry feelings, physical exhaustion, and complaints about problems at work.

Other symptoms include alcohol abuse, lack of patience, tension, aggression, moodiness, depression, emotional numbness, loss of motivation, and loss of interest in the outside world (Nel & Burger, 1998). The ability to function in the family, social and professional worlds is also affected (Carsons, 1982; Nel, 1994, in Nel & Burger, 1998). Since police officers believe that they may not speak to their friends and family about their on - duty experience, they tend to also experience a sense of isolation. Police officers often feel misunderstood at home, and further stressed by domestic responsibilities (Marks, 1995). A study by Solomon, Mikulineer, Fried, and Wosner (1987, in Violanti, 2001) found that married soldiers had higher rates of PTSD than unmarried soldiers. Solomon *et al.* (1987, in Violanti, 2001) attributed these results to many of the added pressures of marriage, such as the obligations of leadership, companionship, caring for the family and other marital responsibilities. Married soldiers also appeared to attribute their traumatic symptoms to the family who made many of their responsibilities seem more difficult to endure. One consequence of this is a high rate of divorce among police (Marks, 1995).

Police officers also receive little or no acknowledgement or positive feedback from their superiors or the community. Instead, maintains Marks (1995), they are often viewed as unproductive members of the civil service, and treated suspiciously by the community, even if they do good work.

4.4. Current research on how police employees cope with stress and trauma

While it may be said that policemen and women will deal with their stress and trauma much as the general population do, the stressful nature of their work entails a greater intensity of intervention for their daily survival. Police officers are trained, according to Ivanoff (1992), not to show weakness, and officers often believe that discussing problems or feelings is a sign of weakness. Police officers are generally an insular group, and are often more reluctant to talk to outsiders or show weakness in front of their own peers than are other emergency service and public safety

workers (Miller, 1999). There are negative descriptions of police dealing with trauma by using and abusing alcohol, by denial and joking (Nel & Burger, 1998).

Apart from the daily stresses and problems, added pressures are experienced by police officers in specialised units who investigate the particularly brutal crimes, such as multiple murders or serial killings (Sewell, 1993, in Miller, 1999). The sheer magnitude and shock effect of many murder scenes, and the violence, mutilation, and sadistic brutality associated with many serial killings, especially if they involve children, often overwhelm the defence mechanisms and coping abilities of the police officers. Revulsion may be tinged with rage, exacerbated if a fellow police officer is injured or killed (Miller, 1999).

Emergency workers using humour as a coping strategy was also discussed by Moran and Massam (1997) and Brown (1998). It is considered acceptable for emergency personnel to resort to humour and denial as ways of avoiding the emotional impact of what they see and do as part of their jobs (Brown, 1998). The kind of humour engaged in crisis situations, often called black humour (Moran & Massam, 1997) appears in situations where work experienced as incongruous is demanded. It is also seen as an illogical, even psychotic, response to irresolvable dilemmas, that offers a way of being sane in an insane place. Moran and Massam (1997), characterise humour as a communication tool and as a means of emotional bonding. They see humour as a positive, healthy coping strategy in emergency work (Moran & Massam, 1997).

4.5. The emergency personnel environment as a continuous stress environment

The most considerable stressor for the police is the constant exposure to trauma, especially over prolonged periods of time (Anderson, 1998). The career of a typical police officer has been described by Anderson (1998, p.3) as "twenty years of peacetime combat, in their own country where they do not always know who the enemy is". The police are generally at the receiving end of all community problems, and their work is often exhausting, dangerous and traumatic. The

constantly increasing crime rates are testaments to the increase in the volume of the work that police officers deal with. The increasing brutality of crime in the country shows that the police continuously deal with gruesome events: " the most violent, impulsive, and predatory members of society; put their lives on the line; and confront cruelties and horrors that the rest of society view from the sanitized distance of newspapers and television screens" (Miller, 1999, p. 2).

In response to the on - going trauma and stress that police officers are subjected to, Anderson (1998, p. 3), developed the diagnostic term: *Police Trauma Syndrome,* which she sees as depicting the cluster of symptoms many police officers suffer as a direct result of the job of policing. Police officers are exposed to incidents that are not only quantitatively but also qualitatively different from those usually experienced by other members of society. Using the DSM - IV criteria for police officers' experience of trauma is problematic because these criteria do not, typically, apply to police (Anderson, 1998). This is the case because police are often required to dissociate themselves from their emotions or to suppress their emotions in order to be able to endure the scenes they attend as part of their work. They are trained to respond behaviourally and not emotionally.

A factor contributing to the stress of policemen and women in our country is that, despite the extremely difficult work they do, police in South Africa receive little or no acknowledgement for their work (Marks, 1995). Lower - ranking police officers are paid poor salaries; have low status within the service; and are generally given no positive feedback and encouragement from their superiors (Marks, 1995). Police are, moreover, given little respect or positive feedback from the communities they serve. Further consideration needs also be given to "police administration" as a contributing factor to stress in the working environment. Problems of "police administration" are very real to officers and sometimes constitute the "second wound" (Anderson, 1998). This occurs on several levels such as the lack of support following critical incidents; lack of promotion opportunities; logistical problems; and manpower shortages. They often construe these problems as arising from betrayal by the organisations for which they daily risk their lives (Anderson, 1998).

For some officers, there may be no single trauma, but rather the cumulative weight of many mundane stresses over the course of their career that may finally result in a mental breakdown. Police work becomes the entire life of some officers, crowding out other activities and relationships (Blau, 1994, in Miller, 1999). For these individuals, organisational stress has a particularly devastating effect. Officers who successfully cope with trauma, experience the agonising discouragement that arises from "police administration", or a lack of acknowledgement more severely. It is obvious that the police are subjected not only to traumatic stress, but also to organisational stress, a combination of which aggravates their constant stress. It is imperative that, if police are to be effectively supported, there are interventions in both aspects of their work environment.

4.6. Conclusion

An important point of this chapter is that police officers experience occupational stress (O' Neill, 1996), family stress (Solomon *et al.*, 1987; Marks, 1995) and traumatic stress (Violanti, 1997, 2001). It is crucial that when police officers feel stressed or have experienced trauma, they speak to others about it. A culture needs to be created in the police service which views the seeking of help and advice as a strength rather than a weakness (Marks, 1995). Violanti (2001) observes, however, that traumatic stress intervention in policing has long been the subject of controversy, and he challenges the present conventional methodology of pathogenic intervention, pointing to the finding that such intervention may negatively affect participant officers. Instead, Violanti (2001) proposes that individuals and not the departmental trauma programmes can best handle trauma and that officers should not be forced to attend debriefings. Individuals, he says, possess their own coping abilities and vulnerability in the wake of trauma, and often grow personally from their own untoward work experiences (Violanti, 2001). It appears that police officers could benefit from personal or even group therapy with personal psychological growth as the primary goal. This could facilitate a better coping with all stresses and traumas.

CHAPTER 5: THE CONTINUOUS STRESS INTERVENTION PROGRAMME

5.1 Introduction

Police work is generally regarded as stressful (Pestonjee, 1992; Violanti, 1985; Selye, 1978, in Gulle, Tredoux & Forster, 1998). Hence, the importance that the SAPS as an organization take responsibility for providing measures both internally and externally to help their employees deal with stress. One of these measures is the CSIP, and this chapter commences by reviewing the theoretical basis of the programme. Then each session of the programme implemented with the police officers involved in this study will be discussed. The study has elsewhere reviewed other theoretical modalities of group therapy for PTSD, and this chapter concludes with a comparison of the CSIP with these modalities.

5.2. The theoretical basis of the programme

The programme was developed as an extension of Mitchell's (1983, in Jacobs, 1995) debriefing model. Mitchell (1983, in Jacobs, 1995) advocated trauma debriefing after every traumatic incident. This was not practical for high - stress units, constantly exposed to critical or traumatic incidents that may be intense and long lasting. During March, 2000, the SAPS Psychological and Social Work Services, with the object of formulating a continuous stress model for implementation to high - risk units, held a workshop facilitated by the Kwazulu-Natal Programme for Survivors of Violence. During the workshop, two debriefing methods were chosen for implementation: the Storytelling and Sealing Over methods (SAPS, 2000).

Storytelling has the individual telling the story or stories about what happened (SAPS, 2000). Sealing Over is applied if the individual appears too fragile to tell the story, or lacks an adequate support system (SAPS, 2000). The Sealing Over method may help the individual to cope until he or she is ready to talk.

The CSIP is a controlled environment in which, thanks to the skills and knowledge of the facilitator, themes are identified, feelings and thoughts are expressed and coping strategies are discussed (SAPS, 2000). The focus of the programme is on the identification of common themes which the facilitator uses, with pre - planned information, to inculcate positive coping strategies.

The goals of stress debriefing are to protect and support the traumatised person and to minimise the development of abnormal stress response syndromes which may cause both loss of time and effectiveness at work, and problems in the family (Mitchell, 1983, in Armstrong, O' Callahan & Charles, 1999). Armstrong *et al.*, (1991) found, in their group, that the use of visual aids to record stressors, feelings and coping strategies helped the group to process their troubling feelings. To improve learning, the SAPS programme employs aids, such as video material, in some of the sessions. The programme is conducted in group sessions with eight to twelve participants. Participation in the programme is strictly voluntary.

5.3. Exploration of individual sessions of the programme

The CSIP is a programme for both trauma and stress management. In the first session, participants and facilitators introduce one another, and facilitators acquire crucial information on the specialised unit's duties. Each session thereafter employs the storytelling debriefing process, leads discussions on positive coping strategies, and concludes with a relaxation exercise. The sessions would begin with the debriefing process, the police officers then provide feedback on their experience of the last session and homework exercises are discussed, the session then proceeds to discussions about coping strategies, homework exercises are given for the next session and a relaxation exercise is conducted at the end of the session. Every police officer in the programme was encouraged to contribute to the discussions in all the sessions. The following table illustrates the additional coping intervention topics addressed with the police officers.

Continuous Stress Intervention Programme: additional coping intervention - specialised unit: May-November 2004.

Additional Coping Intervention
What do you do? Ice breakers. Introduction of facilitator.
Trauma - Exploring the participants' own understanding and experiences.
Trauma -Description, Theories. End with relaxation exercise
Coping with stress and trauma. End with relaxation exercise
Facilitating better family, social and work relationships. Financial problems. End with relaxation exercise.
Anger management and Conflict management. End with relaxation exercise.
Relaxation exercises, Sleep management, Anxiety management. End with relaxation exercise.
Open session. End with relaxation exercise.
Follow -up on open session. End with relaxation exercise.
Closure. End with relaxation exercise.

Table 1: Additional coping intervention topics.

A session was also conducted for the support of the spouses. This was an evening session to create a support network among the spouses of the police officers. The psycho - educational component of the programme uses visual and other aids to make learning more interesting.

5.4. Comparison with other group therapies.

A review of the four theoretical orientations discussed earlier shows that the treatment modality, which the CSIP most resembles, is the Cognitive - Behaviour Model. Both of these models have time - limited sessions and a similar group size. Both are based on two factors: alleviating the PTSD and providing psycho - education so that the group will be able to function in their social, familial and work environments.

5.5. Review of the environment of the emergency personnel in the study

The study was conducted with one of the specialised units in the police. The information on this unit was obtained from interviews with the officers who work in the unit.

The specialised unit representing the sample of this study consists of approximately 54 police officers varying in rank from constable to the unit commander with the rank of a senior superintendent. The unit has both administrative staff and police officers, referred to as operational employees, who work in the field. It is considered a specialized unit, because the officers in the unit are required to receive training beyond the basic training given to all police officers. The further training includes a gruelling fitness programme to ensure that the policemen and women of this unit are at peak fitness at the inception of their work at the unit, this fitness is maintained by continuous weekly training. It has been perceived as an elite unit because of the specialised and intensive training.

The police officers of this unit deal with crimes that they refer to as "in progress". This means that they will attempt to contain situations where crimes are in the process of being committed. It also means that they are often placed in uncertain situations where there are armed and dangerous criminals, where it is their duty to pre - empt the possibility of a shooting incident, or other form of violence. These officers are expected to deal with: burglaries in progress, hijacking situations,

armed conflict, drug and alcohol raids, crowd control, retrieval of suspects from rural areas, from hostage situations, or any other situations for which a station requires assistance. The unit is involved daily with incidents that can be experienced as traumatic. This means that the rate of exposure to danger of these police officers is very high. Most incidents are likely to occur at night.

The officers of this unit are further involved in carrying out duties in addition to their normal police duties, such as overtime duties for evening raids, and specialised duties where they are deployed to rural areas. They receive continuous in - house training to ensure they always function optimally.

They work an eight - day cycle, working for four days, followed by four days off. The four working days include two day shifts, working from 7:00 am to 7:00 pm and two night shifts from 7:00 pm to 7:00 am. The unit works four shifts in this eight-day cycle and each shift involves approximately eight police officers. They function as a cohesive group, which is imperative as their safety and lives depend on their cooperation.

5.5. Conclusion

The programme is theoretically based on the two debriefing concepts of Sealing and Storytelling. The programme, which, as stated above, appears to parallel the Cognitive - Behavioural group treatment modality of PTSD, also has a psycho - educational component to facilitate the development of positive coping strategies for members to continue applying in their lives when the programme is concluded.

CHAPTER 6: METHODOLOGY

6.1 Introduction

This chapter discusses the research methodology. It addresses the aims of the project and the research question. The chapter further explores the research design, sampling methods, study procedure and reviews the instruments employed in the pre and post - test evaluations. The chapter concludes by emphasising the ethical considerations of this research.

6.2 Aim of the Research

The aim of the study is to evaluate the effectiveness of the Continuous Stress Intervention Programme.

6.3 The Research Design

"A research design is a plan, structure and strategy of investigation so conceived as to obtain answers to research questions or problems. The plan is the complete scheme or programme of the research", (Kerlinger, 1986, p. 279, in Kumar, 1996, p.74). This definition was expanded by Kumar (1996) who defined a research design as a procedural plan that is utilized by the researcher to respond to questions validly, objectively, accurately, and economically.

The design of this study is distinctively that of a Programme Evaluation study. Rossi and Freeman (1989, p.18, in de Vos, Strydom, Fouche` & Delport, 2002, p.375) define evaluation research as, "the systematic application of social research procedures for assessing the conceptualisation, design, implementation and utility of social intervention programme". This study is specifically an evaluation research project, designed to measure the effectiveness of a therapy programme. An impact assessment measures the extent to which a programme causes change in the direction for

which it was initially designed (Rossi & Freeman, 1989, in de Vos *et al.*, 2002). In particular, Potter (1999, p. 212, in Terr Blanche & Durrheim, 1999) defines evaluations that attempt to establish the outcomes, effects or impact of a programme as,
"summative evaluation". Summative evaluations examine evidence relating to indicators of programme effectiveness, and for this reason often incorporate quasi - experimental research (Potter, 1999, in Terr Blanche & Durrheim, 1999). The assessment process includes a control group and an experimental group. These groups will be discussed under the heading of Sampling. A direct causal relationship will be explored between the independent variable which is the CSIP and the dependent variables which are the trauma symptoms and coping strategies. An *independent variable* is defined as " the variable that the experimenter manipulates to determine its effect on the dependent material (Potter, 1999, p.38, in Terr Blanche & Durrheim, 1999). Dependent variables have been defined by Kumar (1996) as the outcome of the changes brought about by the independent variable.

The research design of this study is a programme - evaluation design to measure the effectiveness of the programme. It is, specifically, an experimental design with a control group and an experimental group.

6.4 The Research Question and Hypothesis

The research aims to evaluate the effectiveness of the Continuous Stress Intervention Programme with respect to reducing trauma symptoms and enhancing positive coping strategies.

Null Hypothesis 1: Ho - The Continuous Stress Intervention Programme does not have any effect on trauma symptoms as measured by the Impact of Event scale - Revised (Weiss & Marmar, 1997) and the Trauma Symptom Checklist – 40 (Brier, 1996).

Alternative Hypothesis 1: H_1 - The Continuous Stress Intervention Programme decreases the trauma symptoms as measured by the Impact of Event scale - Revised (Weiss & Marmar, 1997) and the Trauma Symptom Checklist - 40 (Brier, 1996).

Null Hypothesis 2: Ho - The Continuous Stress Intervention Programme does not have any effect on the coping strategies as measured by the Coping Response Inventory - Adult (Moos, 1993).

Null Hypothesis 2: H_1 - The Continuous Stress Intervention Programme increases positive coping strategies as measured by the Coping Response Inventory - Adult (Moos, 1993).

6.5 Sampling

A specialised police unit constituted the study population. There are various specialized units, such as, the Serious and Violent Crime Investigation Unit, the Family Violence/Child Abuse and Sexual Assault Unit, The Search and Rescue Unit, the Explosives Unit. These units are tasked with investigating serious and heinous crimes, and often deal with these crimes on a daily basis. The CSIP was developed for these units because they deal with potentially traumatising situations regularly. The sample size consists of 32 police officers, with the experimental group comprising 24 and the control group had 8 officers.

This study adopted a non - random or probability sampling design. Kumar (1996, p. 160) says that this type of sampling design is used when the number of elements in a population either is unknown or cannot be individually identified. The specialised unit constituting a sample in this study was easily accessible, as the police officers worked in shifts that made possible the group sessions. The police commander had identified this high - stress unit as one to which the CSIP should be presented as a means of intervention. Kumar (1996) refers to this type of sampling design as *accidental* sampling that is, sampling based on convenience in accessing the sampling

population. The police officers forming the sample of this study had not been tested to establish if they were more traumatised, or even suffering more from PTSD, than the officers in the other specialised units. Nevertheless, before - intervention assessments indicated the degree of exposure to traumatic events in terms of the Impact of Event scale - Revised and the Trauma Symptom Checklist - 40.

6.6 The Research Procedure

Before the programme could be implemented with the police officers from the specialised unit, permission was granted by the unit commander. A letter was sent internally, as the researcher of this study is an employee of the police in the Employee Assistance section (Appendix A). The commander of the unit granted telephonic permission for implementation of the programme for evaluation purposes.

The following table indicates the assessment process of the research study.

GROUPS and NUMBER IN GROUP	PRE - ASSESSMENT	INTERVENTION	POST - ASSESSMENT
Group A - 8 participants	May 2004	11 sessions of the Continuous Stress Intervention Programme, including a support session with the spouses	October 2004/ November 2004
Group B - 8 participants	May 2004	11 sessions of the Continuous Stress Intervention Programme, including a support session with the spouses	October 2004/ November 2004
Group C - 8 participants	May 2004	11 sessions of the Continuous Stress Intervention Programme, including a support session with the spouses	October 2004/ November 2004
Group D - 8 participants	May 2004	No intervention	October 2004/ November 2004

Table 2: Assessment process of the study.

The individual commanders of the four experimental groups of this unit were contacted, and dates were agreed upon for all the sessions of the programme. A pre - test was administered during the introductory session of the programme, and a post - test three months after the programme had been completed (see Table 2). However, one of the groups did not follow the programme after the introductory session, because of logistical problems, and it formed the control group. Sessions of 90 minutes each were held weekly, until the completion of the ten sessions. The police officers who attended the programme, were also handed an information package at the end of the 10 sessions, which contained some of the psycho - educational material discussed during the programme itself (Appendix J). Feedback on how the police officers perceived the programme, was provided verbally during the last session.

6.7 Instruments

This study included a self - report questionnaire in both the pre and the post - test evaluations. The components of the questionnaire are: Biographical Data, The Social Readjustment Rating Scale (Holmes and Rahe, 1967), Impact of Event Scale - Revised, (Weiss and Marmar, 1997), Trauma Symptom Checklist - 40, (Brier, 1996) and the Coping Response Inventory - Adult Form, (Moos, 1993). A copy of the questionnaire is included in Appendix A.

6.7.1 Biographical Data

Biographical data are gathered for the sample description. This allowed comparison with other populations with matched descriptions, such as with rank, age, gender, race, and years of employment. This section further attempted to establish if the police officers had experienced incidents that could be considered traumatic and what types of incidents these were, to ensure that the sample base had indeed experienced trauma. It also allowed for the identification of those officers who had previously attended trauma debriefing sessions, to ascertain if they had received

organisational support to deal with their exposure to trauma. An attempt was made to discover if the police officers perceived therapy as providing support. The questionnaire sought also to establish the number of years of experience of performing their duties the officers had and whether they were currently contemplating leaving the police force, and, if so, for what reasons.

6.7.2 The Social Readjustment Rating Scale

6.7.2.1 Description of the instrument

The Social Readjustment Rating scale was included in the questionnaire to establish if there had been any changes in the lives of the participants during the interval between from the pre- and the post - assessments. The Social Readjustment Rating Scale (SRRS) was developed by Holmes and Rahe (1967) as a self - report measure of cumulative stress events to which an individual has been exposed over a period of six months. It is a 41 - item scale with each item given a weight of between 9 and 100 depending on its level of impact. The scoring of the instrument involves the summation of the weighted scores (see Appendix C). Cooke and Hole (1983, in Raju, Srivastava, Chaudhury & Salusha, 2001) declare that a review of the epidemiological studies of life events and psychiatric disorders has shown that 32% of the psychiatric cases (of whom 41% are female) can be attributed to stressful life events. Raju *et al.* (2001) maintain that, on the basis of the amount of research that has been conducted on stressful life events, it can be assumed that such events serve as predisposing and precipitating factors for subsequent illness episodes.

6.7.2.2 Validity and Reliability of the Instrument

Cross-cultural studies of the instrument have found strong correlations $r = 0.969$, $p < .001$), suggesting high external validity (Isherwood & Adam, 1976, in Staines, 2000). In addition, Gerst, Grant, Yager and Sweetwood (1978, in Staines, 2000) discovered that non - psychiatric

respondents show good temporary stability in their estimations of the ranking and magnitude of the stressfulness of specific life events.

6.7.3 Impact of Event Scale - Revised (IES - R)

6.7.3.1 Description of the Instrument

The IES - R was developed by Weiss and Marmar in 1997 to parallel the DSM-IV criteria for PTSD. The IES - R is a self-report measure designed to assess current subjective distress for any specific life event (Weiss & Marmar, 1997). This instrument has 22 items arranged on three scales: Avoidance sub - scale, Intrusion sub - scale and Hyperarousal sub - scale. The scoring method involves calculating the mean of the items in each sub - scale (see Appendix D).

6.7.3.2 Validity and Reliability of the Instrument

Weiss and Marmar (1997) note that the hyperarousal sub - scale has good trauma predictive validity and that the intrusion and avoidance sub - scales have also been able to detect change in the respondents' clinical status over time and to detect relevant differences in their response to traumatic events of varying severity. In their study of four population samples, Weiss and Marmar (1997) report that the internal consistency of the three sub - scales were found to be very high, with coefficient alphas ranging from .87 to .92 on the intrusion sub - scale, coefficient alphas ranging from .84 to .86 on the avoidance sub - scale , and coefficient alphas ranging from .79 to .90 on the hyperarousal sub - scale.

6.7.4 Trauma Symptom Checklist-40

6.7.4.1 Description of the Instrument

The TSC - 40 is a research measure that evaluates adult symptoms associated with childhood or adult traumatic experiences (Brier, 1996). The TSC - 40 is a 40-item self - report instrument consisting of six sub - scales: Anxiety, Depression, Dissociation, Sexual Abuse Trauma Index (SATI), Sexual Problems, and Sleep Disturbance, as well as a total score. The item analysis of the TSC - 40 are included in Appendix E. Each symptom is rated according to its frequency of occurrence over the previous two months, using a four-point likert scale ranging from 0 ("never") to 3 ("often").

6.7.4.2 Validity and Reliability of the Instrument

Studies using the TSC - 40 indicate that it is a relatively reliable measure, with sub - scale alphas typically ranging from .66 to .77 and the full scale alphas averaging between .89 and .91. (Brier, 1996). Brier (1996) also stated that the TSC - 40 and its predecessor the Trauma Symptom Checklist - 33, have predictive validity with reference to a wide variety of traumatic responses. The TSC - 40 also appears to predict perpetration of intimate violence (Dutton, 1995, in Brier, 1996) and vicarious traumatisation in psychotherapists (Chrestman, 1995, in Brier, 1996). The purpose of using two measures for trauma symptoms was to ensure validation of the results obtained on each scale. This is type of validity is described as " construct validity", which is defined as "validating a test with regard to the meaning and the nomological network of the construct" (de Groot, 1969, p. 255).

6.7.5 Coping Response Inventory

6.7.5.1 Description of the Instrument

The CRI - A was developed by Moos (1993) as a self - reported questionnaire designed to elicit respondents' coping strategies in response to a typical stressful event. The respondent identifies and describes the stressful event. The CRI - A measures eight types of coping strategies. These responses are measured by eight scales, the first four assessing approach coping and the second four assessing avoidance coping. The scales are: Logical Analysis, Positive Reappraisal, Seeking Guidance and Support, Problem Solving, Cognitive Avoidance, Resigned Acceptance, Seeking Alternative Rewards and Emotional Discharge (Appendix F). The instrument is scored by summing the ratings for the appropriate items of each sub - scale. Moos (1993) asserts that approach coping responses have been empirically revealed to relate to more adaptive psychological functioning than the avoidance coping responses.

6.7.5.2 Validity and Reliability of the Instrument

The content and face validity is strengthened by (a) the formulation of definitions of specific domains; (b) the preparation of items to fit the construct definitions; and (c) by the selection of items that were conceptually related to a dimension. Moos (1993) empirically confirmed the validity of the instrument. He also confirmed that the coping indices were moderately stable over time with the mean r = 0.45 for men and 0.43 for women. The sub - scale alphas were relatively high, between 0.58 and 0.71 (Moos, 1993).

6.8 Methods of Analysis

According to Hinkle, Wiersma and Jurs (1988), for research settings in which the independence assumption is not met, that is, when there are repeated measures of the same subjects, the *t* - test

for dependent samples is used as a statistical measure. This assessment could have been conducted through a paired sample *t* - test. However, the analysis of the results was conducted through the use of a repeated measures analysis - of - variance (ANOVA), specifically, the mixed between - within subjects analysis of variance with the SPSS (Version 11) statistics programme (a copy of all statistics is available from the researcher of this study). The ANOVA as a statistical measure compares the variance (variability in scores) between the different groups, caused by the independent variable, with the variability within each of the groups (Pallant, 2001). In a repeated measures ANOVA, the subject is exposed to two or more different conditions, or measured during two or more time periods. The mixed between - within subjects ANOVA is a combination of the between - subjects design that compares two or more different groups, which, in this study are the experimental and the control groups, and a repeated measures design, in this study the pre - assessment measure with the post - assessment measure. The analysis will test whether there is a significant difference between the experimental and control groups from the pre - assessment to the post - assessment on the various instruments.

6.9 Ethical considerations of the study

Ethical considerations emerge at three stages of any research project: when participants are recruited, during the intervention or measurement procedure to which they are subjected and on the release of results (Huysamen, 1994). Two further ethical issues are: the withholding of a potentially beneficial intervention from the control groups and the exploitation of the scientific research process for personal gain.

6.9.1 Informed consent

At the recruiting stage of the study, the researcher ensured that each participant in the programme was informed during the introductory session that the programme was being evaluated and that a pre and post - assessment would be conducted. They were informed that, with their consent, the

results would be utilised as part of my research study. The police officers agreed not only to attending the programme, but also to completing the evaluation questionnaire before and after the programme. They were also informed of the purpose of the study and the importance of the research. In addition, the groups were told that the study would take group averages and not individual results as a measure. The control group agreed to be part of the programme and completed the questionnaire in the single session they attended, which was the introductory session. Thereafter, they did not, because of logistical problems, follow the rest of the programme. Having been told that it formed part of the research project's programme evaluation, they were asked to complete the post - assessment questionnaire, to which they consented.

6.9.2 Voluntary participation

At the outset of the programme evaluated in this study, the participants of all four groups were informed that they could only be part of the programme, if their participation was voluntary. It was explained to all participants that they had the right not to participate in the programme, in spite of the commander of the unit's having granted permission to proceed with the intervention. The participants autonomously assented to being part of both the programme and its evaluation in the study.

6.9.3 Exposure to physical and psychological pain and discomfort

The participants were assured of confidentiality, dignity, freedom from physical and psychological discomfort, and freedom to make their own decisions during the assessment process. The programme and assessment were conducted in a safe, secluded area within the unit itself. The researcher ensured that there were no distractions or disturbances from other personnel.

6.9.4 Respecting the privacy of the research participants

The participants of the research were assured of confidentiality and told that their contribution to the study would be their completion of the questionnaires in both assessment periods. They were informed that feedback would be given individually, if the results on any of the instruments gave cause for concern.

6.9.5 Withholding beneficial treatment from the control group

The control group were offered the programme during the same period as the other three groups, but they did not attend. They were then advised that they could still participate in the programme whenever it was logistically possible for them to participate as a group.

6.10 Conclusion

This chapter discussed the methodological issues of this study, one of which shows that the aim of this research is to investigate the effectiveness of the CSIP by means of the instruments utilised. The instruments are the SRRS, the IES - R, the TSC - 40 and the CRI - A. The purpose, validity, reliability and the scoring guidelines of these instruments were discussed. The research design of this study is a quasi - experimental programme evaluation design to measure the effectiveness of the programme. A crucial segment of this chapter is the discussion of the ethical considerations of this study, since it is the responsibility of the researcher to ensure that possible ethical transgressions are identified early, so that appropriate measures can be taken to prevent these from occurring.

CHAPTER 7: RESULTS

7.1 Introduction

The results of this study were firstly investigated with respect to the psychometric properties of the various dependent variables. This began by conducting a reliability analysis of all the instruments, a frequency count with the scores from the Social Readjustment Rating scale and a comparison of the experimental and control groups between the pre - assessment and the post - assessment with: the Impact of Event Scale - Revised, the Trauma Symptom Checklist - 40, the Coping Response Inventory - Adult form including the sub - scales. The internal consistency of the scales are presented indicating the reliability of each scale analysed in this study for both the pre - assessment as well as the post - assessment measures. The results of the Social Readjustment Rating Scale will be discussed through a comparison of the frequency counts between the two assessment periods. A mixed between - within groups analysis of variance (ANOVA) was utilised as a technique to test for significant differences between the groups with: the Impact of Event Scale - Revised (total scale and each sub - scale), the Trauma Symptom Checklist - 40 (total scale and each sub - scale), and the sub - scales of the Coping Response Inventory - Adult form. Significance is calculated at a p value $< .05$. The significant results of the mixed between - within groups ANOVA will be discussed with the individual scales and the following sub - scales: the Avoidance sub - scale of the Impact of Event Scale - Revised; the Depressive symptom sub - scale, the Dissociation sub - scale, and the Anxiety sub - scale of the Trauma Symptom Checklist - 40; as well as the Positive Reappraisal sub - scale, the Seeking Guidance and Support sub - scale, and the Problem Solving sub - scale of the Coping Response Inventory - Adult form.

7.2 The internal consistency of the scales analysed in this study

The internal consistency of the scale "is the degree to which the items that make up the scale are all measuring the same underlying attribute" (Pallant, 2001, p. 6). One of the ways of assessing the

internal consistency of a scale in using the Cronbach's coefficient alpha (this was the statistical measure utilised in this study with the SPSS programme). A minimum level of .7 is considered necessary for internal reliability (Nunnally, 1978 in Pallant, 2001). The following table presents the internal consistency of the scales analysed in this study. A more detailed table of all the scales for all four instruments is included in Appendix G.

TABLE 3

SCALES	CRONBACH ALPHA: PRE - TEST	CRONBACH ALPHA: POST - TEST
Social Readjustment Rating Scale	**.7349**	**.7070**
Impact of Event Scale - R (Total)	**.9676**	**.9759**
Avoidance sub - scale (IES-R)	**.8764**	**.9333**
Trauma Symptom Checklist - 40 (Total)	**.9299**	**.9230**
Dissociation sub - scale (TSC-40)	.6138	.4651
Anxiety sub - scale (TSC-40)	.6298	.6091
Depression sub - scale (TSC-40)	**.7696**	**.8031**
Positive Reappraisal sub - scale (CRI-A)	**.7475**	.8601
Seeking Guidance & Support sub - scale (CRI-A)	**.7719**	**.7787**
Problem Solving sub - scale (CRI-A)	**.8778**	**.8636**

Table 3: Internal consistency of scales analysed in this study

The overall reliability for the Social Readjustment Rating Scale is .7349: pre - assessment and .7070: post - assessment which is within the acceptable level of reliability. The overall reliability for the Impact of Event Scale - Revised is .9676: pre - assessment and .9759: post - assessment which is a high level of reliability. The overall reliability for the Trauma Symptom Checklist - 40 is

.9299: pre - assessment and .9230: post - assessment which is also a high level of reliability. The reliability assessment for the Coping Response Inventory - Adult was conducted with the nine individual scales and not the total score. The internal consistency for these scales varies between .4772 and .8778, however, most of the sub - scales have reliability scores within the acceptable level.

7.3 Results of the Social Readjustment Rating Scale

As previously mentioned, the result of the SRRS was assessed through a frequency count of the instrument for the pre - assessment and the post - assessment (Appendix G). The internal reliability of the scale for the pre - assessment period is .7349 and the reliability of the scale for the post assessment is .7070. Although the reliability of the scale dropped from the pre - assessment to the post - assessment, the reliability scores are still within acceptable measures. In terms of the total scale for each assessment period, there is an increase in the life changing events from the pre - assessment period of 167 'Yes' responses to the post assessment period of 211 'Yes' responses. This indicates that there was an increase in life changing events from the first assessment period to the second assessment period. The frequency count of the SRRS revealed that of the 41 questions in the scale twenty questions had an increase in 'yes' responses, four questions had a decrease in 'yes' responses and seventeen of the questions had the same number of 'yes' responses for both assessment periods. There was a large increase in Questions 15 (change in financial status), 18 (change in the number of arguments with family members), 34 (change in church activities), 37 (change in sleeping patterns) and 38 (change in the number of family holidays and outings) from the pre - assessment to the post - assessment. The largest decrease between the two assessment periods occurred for Question 20 (unable to pay mortgage or loan).

7.4 Mixed between - within subjects ANOVA

The ANOVA results for all the scales analysed in this study are in Appendix I.

7.4.1 Within - subjects factor (All scales)

The within - subjects factor shows the variables that were analysed in the ANOVA to determine the within - subjects effect. Table 4 illustrates the variables that are analysed for the within - subjects effect for all the scales. The table shows that the analysis in terms of the within - subjects ANOVA is conducted with the total score (experimental group and control group) between the pre - assessment and the post - assessment scores.

Measure	Dependent Variable
Pre	Score of scale (control group and experimental group)
Post	Score of scale (control group and experimental group)

Table 4: Within - subjects factor for all the scales

7.4.2 Between - subjects factor (All Scales)

The between - subjects factor indicates the variables that were analysed in the ANOVA to determine the between - subjects effect. Table 5 illustrates the variables that are analysed for the between - subjects effect for all the scales. The between - subjects analysis is conducted between the scores gathered from the experimental and the control groups.

Measure	Value Label	N
Experimental1	Experimental	24
Control 2	Control	8

Table 5: Between subjects factor for all the scales

7.4. 3 Mixed between-within subjects ANOVA of the IES - R

The result of the IES-R is presented with the ANOVA of the total score of the scale as well as the ANOVA of the Avoidance sub - scale of this instrument.

7.4.3.1 ANOVA results of the within - subjects effect (IES - R total)

TABLE 6

Measure	Wilk'S Lambda value	Hypothesis df	Error df	F	Significance
Pre-Post	.904	1	30	3.192	.084
Interaction	.786	1	30	8.173	.008

There was no significant difference between the pre - test and the post test, Wilk's Lambda = .904 F(1,30) = 3.192 with a significance value p =.084. There is no difference between the pre - assessment and the post - assessment as the means of the scores at both assessment periods were not significantly different. However, there is a significant interaction effect which indicates that the scores of the two groups significantly changed between the two assessment periods.

7.4.3.2 ANOVA results of the between - subjects effect (IES - R Total)

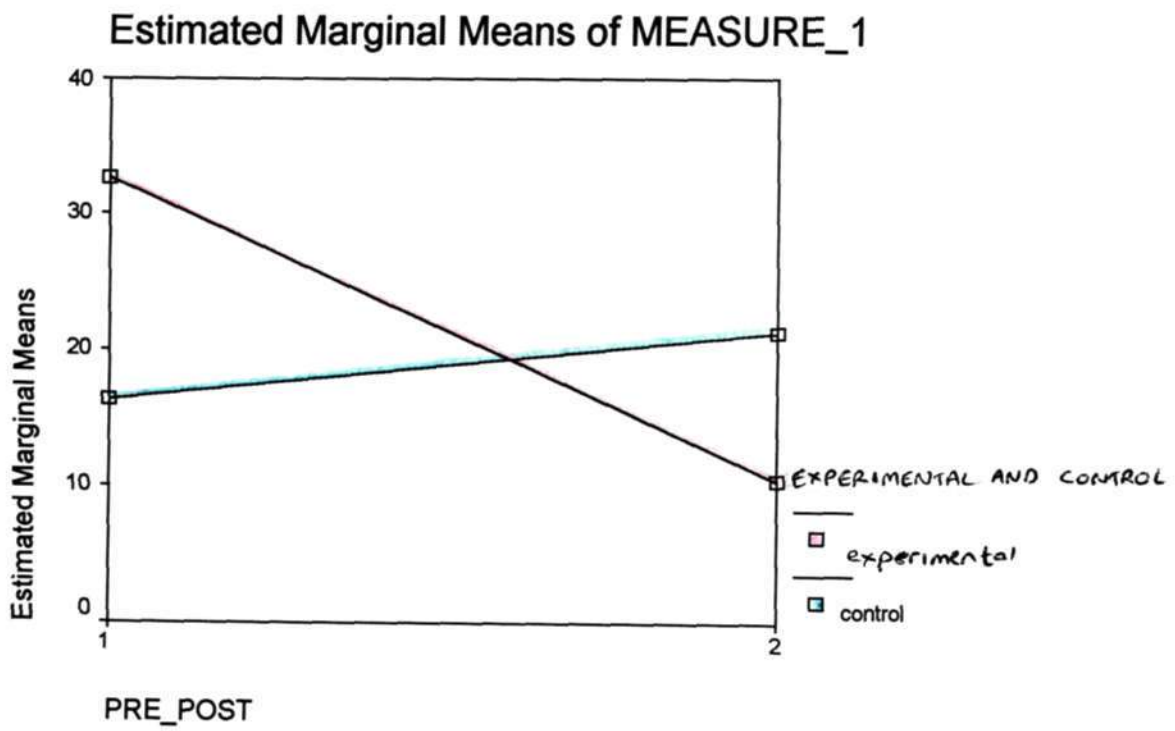
TABLE 7

Measure	Type III sum of squares	df	Mean Square	F	Significance
Intercept	19521.333	1	19521.333	36.627	.000
Group	88.021	1	88.021	.165	.687

The was no significant difference between the two groups which indicated that the main effect is non significant on the IES-R (Total scale) between the experimental and control groups. However, the intercept between the two groups is significant.

7.4.3.3 Profile Plot of IES-R (Total scale)

FIGURE: 1



The profile plot revealed that there was a decrease in the scores from the pre - assessment to the post - assessment for the experimental group, while there was an increase for the scores between the two assessment periods for the control group.

7.4.3.4 ANOVA results of the within - subjects factor (Avoidance sub - scale)

TABLE 8

Measure	Wilk's Lambda value	Hypothesis df	Error df	F	Significance
Pre-Post	.949	1	30	1.628	.212
Interaction	.789	1	30	8.034	.008

There was no significant difference between the pre - assessment and the post - assessment for the group. Wilk's Lambda, = .949, F (1, 30) = 1.628, p = .212. There is no significant difference between the pre and post results on the Avoidance sub - scale for the total group. However, there is a significant difference between the pre and post results on the Avoidance sub - scale in terms of the interaction effect. Wilk's Lambda = .789, F (1, 30) = 8.034, p = .008. This means that the two groups significantly varied in terms of the change in scores for the Avoidance sub - scale between the two assessment periods.

7.4.3.5 ANOVA results of the between - subjects effect (Avoidance sub - scale)

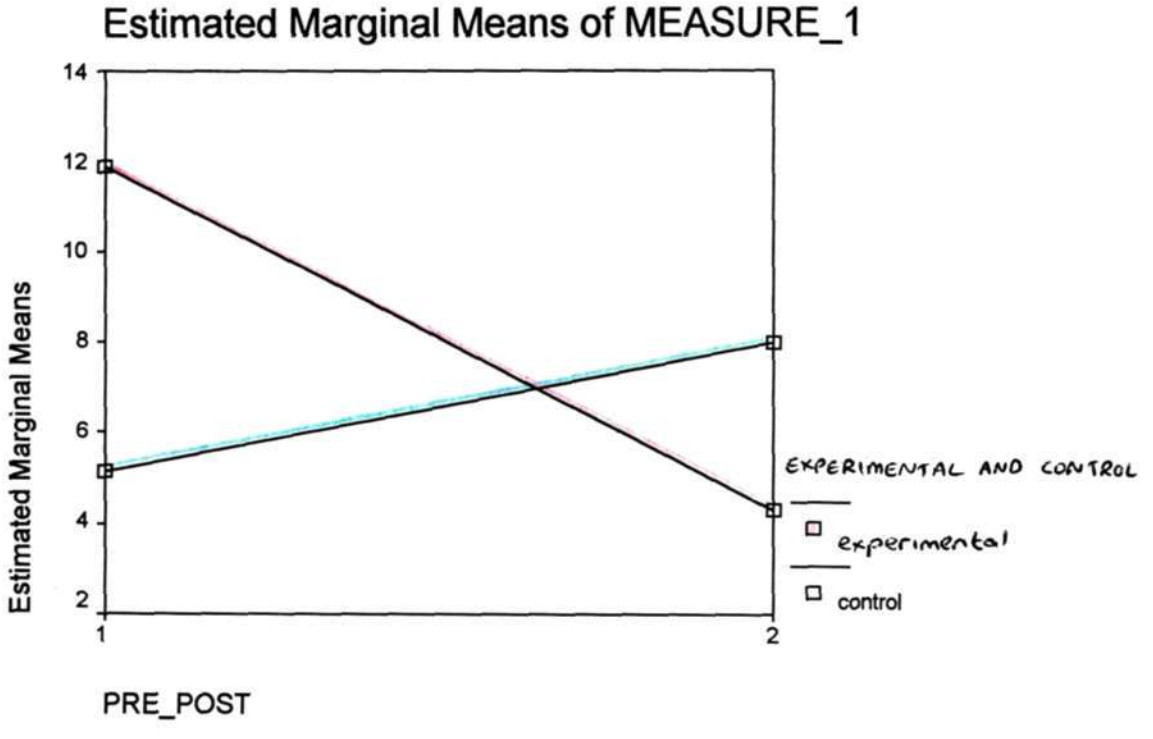
TABLE 9

Measure	Type III sum of squares	df	Mean Square	F	Significance
Intercept	2574.005	1	2574.005	35.998	.000
Group	27.755	1	27.755	.388	.538

Although the intercept between the two groups was significant, p = .000, the main effect for the intervention was, p = .538 which is not significant.

7.4.3.6 Profile Plot - Avoidance sub - scale

FIGURE: 2



The profile plot for the Avoidance sub - scale shows that there is a decrease in the scores for the scale from the pre - assessment to the post - assessment for the experimental group, while there was an increase in the scores for the scale for the control group.

7.4.4 Mixed between - within subjects ANOVA of the TSC-40

The results of the TSC - 40 included the ANOVA results of the scores for the total scale as well as the ANOVAs of the Depressive symptom sub - scale, the Dissociation sub - scale and the Anxiety sub - scale.

7.4.4.1 ANOVA results of the within - subjects effect (TSC - 40 Total)

TABLE 10

Measure	Wilk's Lambda value	Hypothesis df	Error df	F	Significance
Pre-Post	.815	1	30	6.825	.014
Interaction	.897	1	30	3.434	.074

There was a significant difference between the pre - assessment and the post - assessment, Wilk's Lambda = .815, F (1, 30) = 6.825, p = .014 on the TSC - 40 total scale. However, there was no significant interaction effect. Wilk's Lambda = .897, F (1, 30) = 3.434, p = .074

7.4.4.2 ANOVA results of the between - subjects factor (TSC - 40 - Total scale)

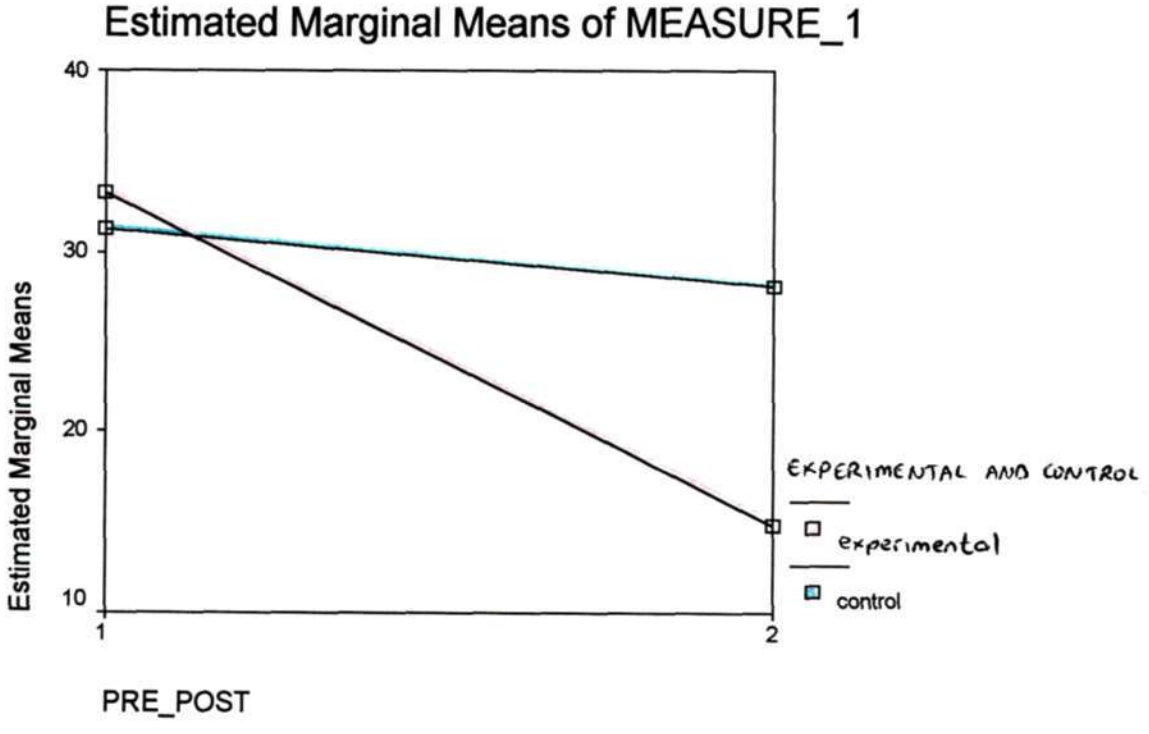
TABLE 11

Measure	Type III sum of squares	df	Mean Square	F	Significance
Intercept	34668.750	1	34668.75	69.226	.000
Group	379.687	1	379.687	.758	.391

Although the intercept between the two groups was significant, there was no significant difference for the main effect, significance, p = .391. This means that there was no difference between the experimental and control groups as measured on the TSC-40 total scale for the post assessment following the intervention with the experimental group.

7.4.4.3 Profile Plot - TSC - 40 total scale

FIGURE: 3



The profile plot for the TSC - 40 shows that there was a decrease in the total scale for both the experimental group and the control group. However, the decrease in the scores for this scale was greater for the experimental group.

7.4.4.4 ANOVA results of the within - subjects effect (Depression sub - scale)

TABLE 12

Measure	Wilk's Lambda value	Hypothesis df	Error df	F	Significance
Pre-Post	.882	1	30	3.999	.055
Interaction	.933	1	30	2.158	.152

The results indicated that there was no significant difference between the two assessment periods on the Depression sub - scale, Wilk's Lambda = .882, F (1, 30) = 3.999, p = .055. The interaction effect was also not significant, Wilk's Lambda = .933 F (1, 30) = 2.158, p = .152.

7.4.4.5 ANOVA results of the between - subjects effect (Depression sub - scale)

TABLE 13

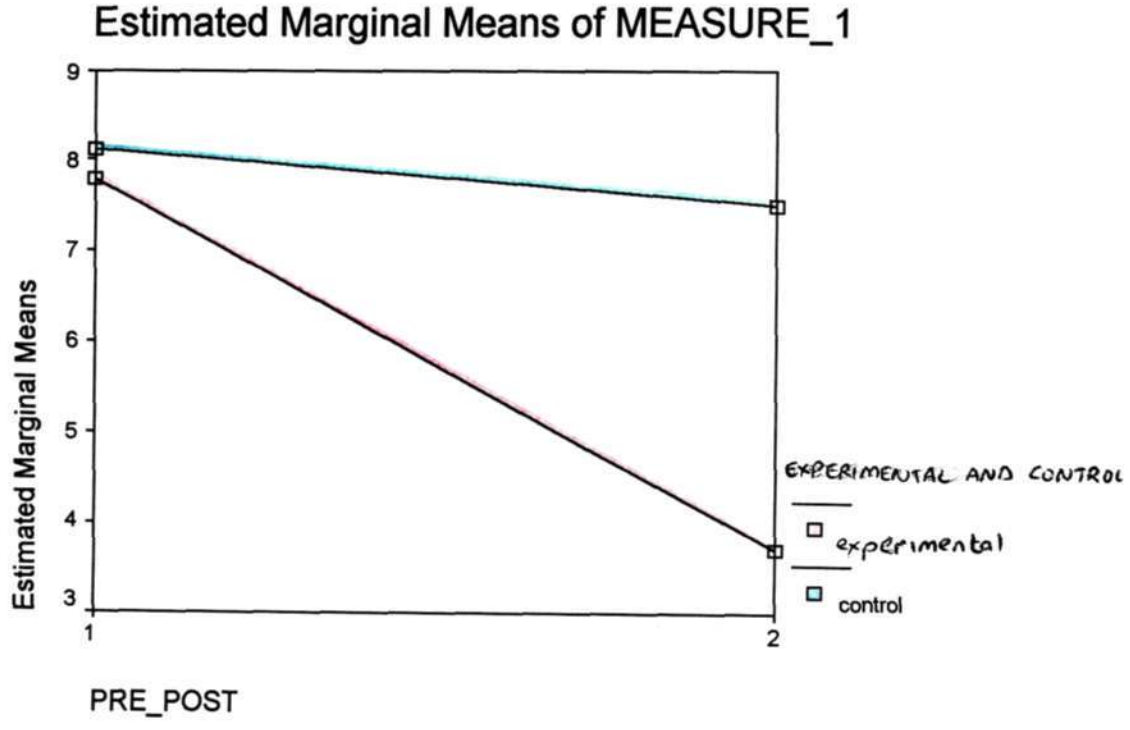
Measure	Type III sum of squares	df	Mean Square	F	Significance
Intercept	2207.297	1	2207.297	57.335	.000
Group	35.880	1	35.880	1.326	.259

Although the intercept between the two groups was significant (p =.000), the group significance was, p = .259 which is well above the alpha level of .05. Hence, the main effect for the

intervention is not significant, which means that there was no significant difference between the group means at the post - assessment.

7.4.4.6 Profile Plot - Depression sub - scale

FIGURE: 4



There was a decrease in the scores for the Depression sub - scale for both the control group and the experimental group from the pre - assessment to the post - assessment, but the decrease in the experimental group occurred at a greater level.

7.4.4.7 ANOVA results of the within - subjects effect (Dissociation sub - scale)

TABLE 14

Measure	Wilk's Lambda value	Hypothesis df	Error df	F	Significance
Pre-Post	.821	1	30	6.561	.016
Interaction	.867	1	30	4.605	.040

There was a significant difference between the pre - assessment scores and the post - assessment scores, Wilk's Lambda = .821, F (1, 30), p = 6.561 with a significance value of .016.
The results indicated that there was a significant difference between the two assessment periods measured on the Dissociation sub - scale. The interaction effect was also significant for the Dissociation sub - scale, Wilk's Lambda = .867, F (1, 30) = 4.605 with a significance value = .040.

7.4.4.8 ANOVA results of the between - subjects effect (Dissociation sub - scale)

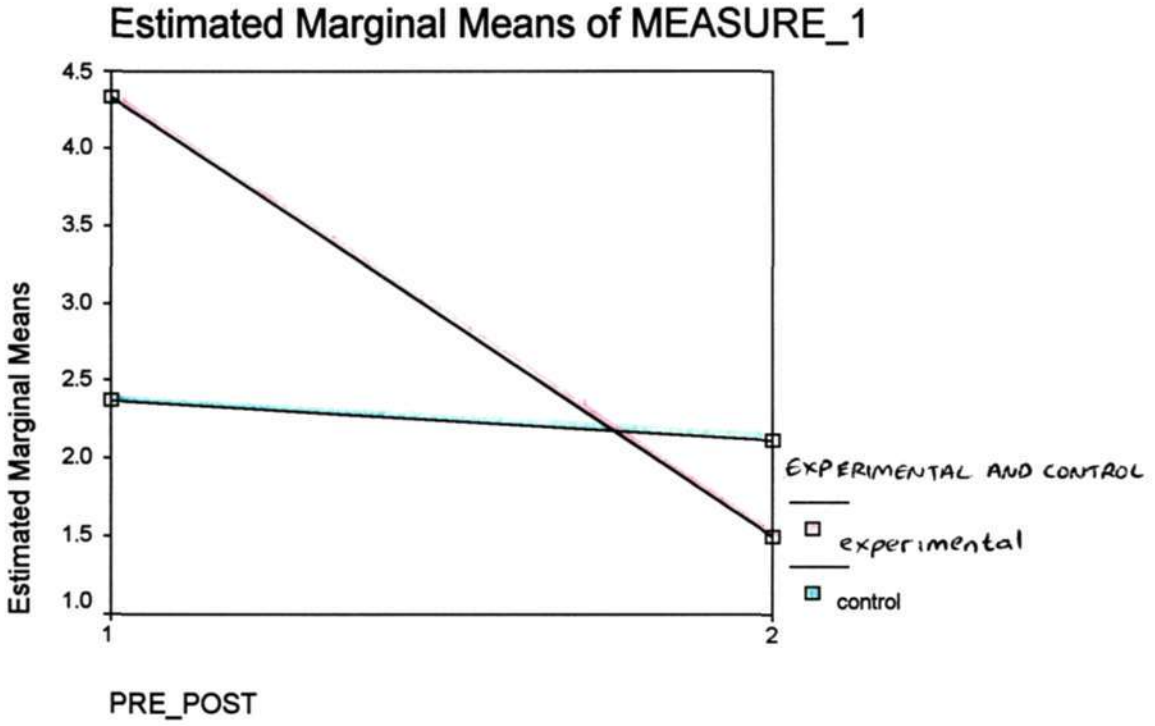
TABLE 15

Measure	Type III sum of squares	df	Mean Square	F	Significance
Intercept	320.333	1	320.333	31.033	.000
Group	5.333	1	5.333	.517	.478

Although the intercept between the two groups was significant (p = .000), the group significance was .478 which is well above the alpha level of .05. Hence, the main effect for the intervention was not significant on the dissociation sub - scale.

7.4.4.9 Profile Plot - Dissociation sub - scale

FIGURE : 5



The profile plot for the Dissociation sub - scale reveals that there was a decrease in the scores for the experimental group from the pre - assessment to the post - assessment, while the scores for the control group decreased but very marginally.

7.4.4.10 ANOVA results of the within - subjects effect (Anxiety sub - scale)

TABLE 16

Measure	Wilk's **Lambda value**	**Hypothesis df**	**Error df**	**F**	**Significance**
Pre-Post	.909	1	30	2.989	.094
Interaction	.909	1	30	2.989	.094

The results indicated that there was no significant difference between the two assessment periods, Wilk's Lambda = .909, F (1, 30) = 2.989 with a significance value = .094.The interaction effect, Wilk's Lambda = .909, F (1, 30) = 2.989 was also not significant for the Anxiety sub - scale with a significance value = .094.

7.4.4.11 ANOVA results of the between - subjects affect (Anxiety sub - scale)

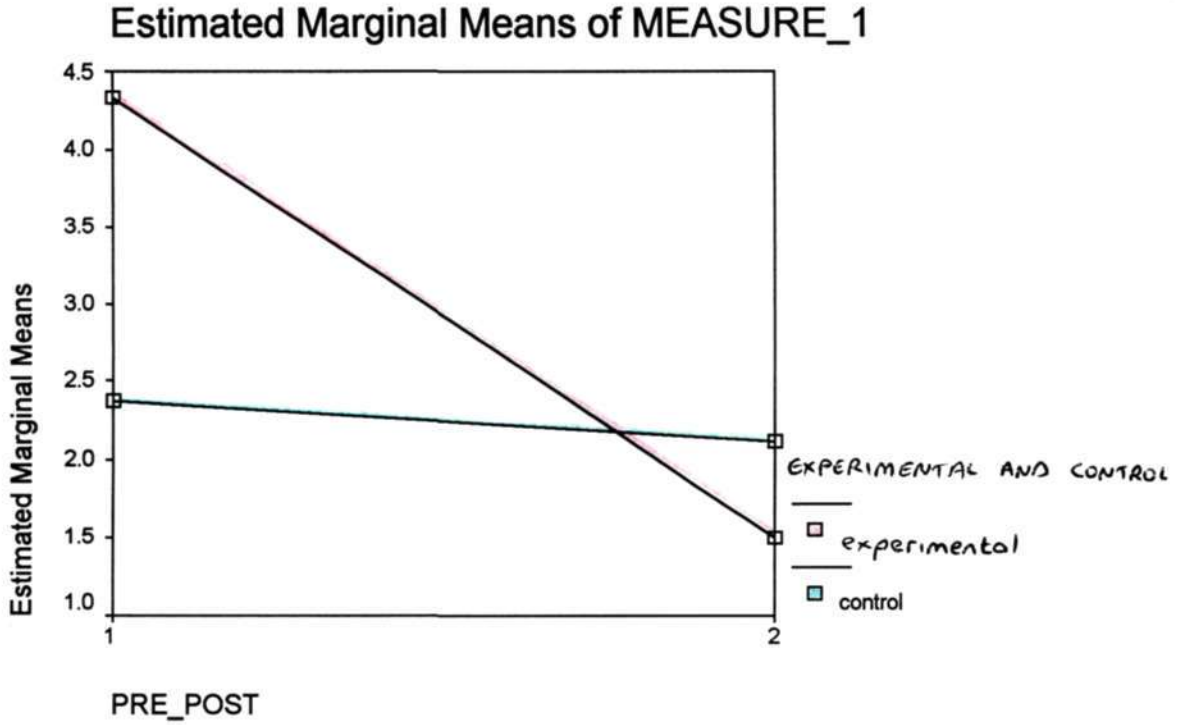
TABLE 17

Measure	**Type III sum of squares**	**df**	**Mean Square**	**F**	**Significance**
Intercept	1150.521	1	1150.521	55.723	.000
Group	3.521	1	3.521	.171	.683

Although the intercept between the two groups was significant, .000, the group significance was .683 which is well above the alpha level of .05. Hence, the main effect for the intervention was not significant.

7.4.4.12 Profile Plot - Anxiety sub - scale

FIGURE: 6



The profile plot for the Anxiety sub - scale reveals that there was a decrease in the scores from the pre - assessment to the post - assessment for the experimental group, while there was a slight decrease in the scores between the two assessment periods for the control group.

7.4.5 Mixed between - within subjects ANOVA for the CRI - A

The results of the CRI - A included ANOVA results of the Positive Reappraisal sub - scale, the Seeking Guidance and Support sub - scale and the Problem Solving sub - scale.

7.4.5.1 ANOVA results of the within - subjects effect (Positive Reappraisal sub - scale)

TABLE 18

Measure	**Wilk's Lambda value**	**Hypothesis df**	**Error df**	**F**	**Significance**
Pre-Post	.737	1	30	10.711	.003
Interaction	.906	1	30	3.106	.088

The results indicate that there is a significant difference between the groups on the Positive Reappraisal sub - scale, Wilk's Lambda = .737, F (1, 30) = 10.711 with a significance value = .003. The interaction effect is however, not significant for the Positive Reappraisal sub - scale, Wilk's Lambda = .906, F (1, 30) = 3.106 with a significance value of .088.

7.4.5.2 ANOVA results of the between - subjects effect (Positive Reappraisal sub - scale)

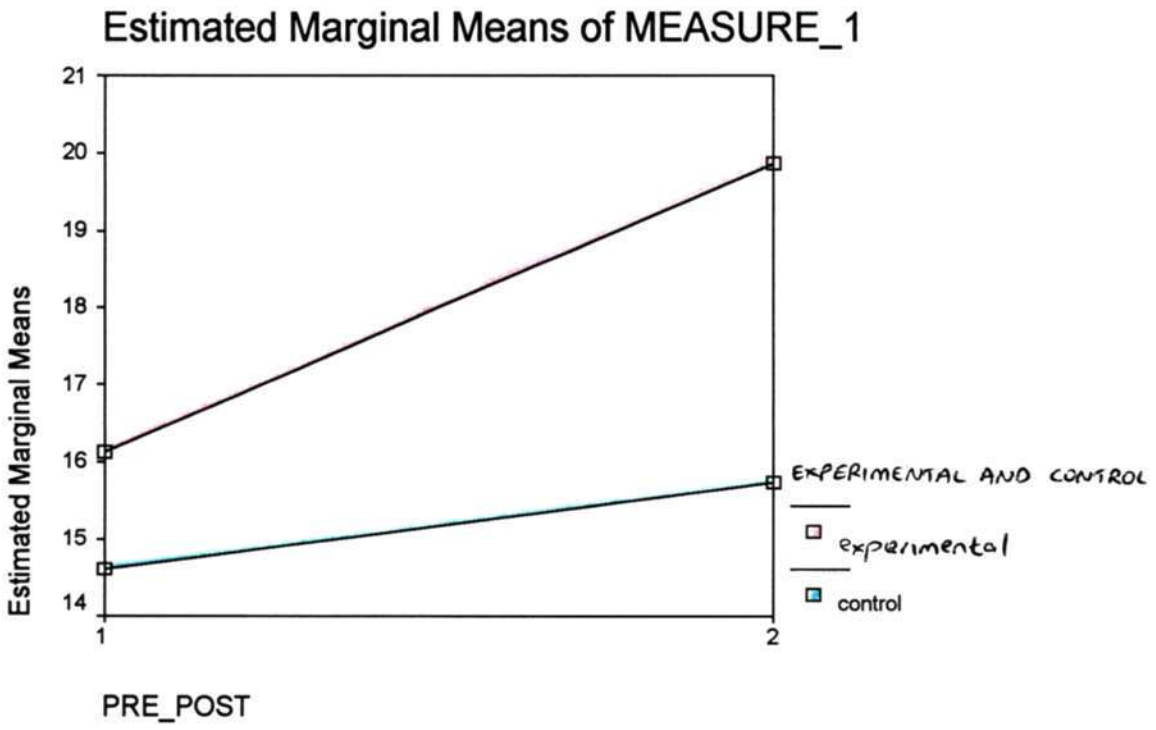
TABLE 19

Measure	Type III sum of squares	df	Mean Square	F	Significance
Intercept	13216.922	1	13216.922	673.259	.000
Group	94.922	1	94.922	4.835	.036

Both the intercept between the two groups as well the main effect occurred at a significant level. The Intercept significance is , p = .000. The group significance, p = .036 indicated that there was a significant difference in the Positive Reappraisal scale between the two groups following intervention with the experimental group.

7.4.5.3 Profile Plot - Positive Reappraisal sub - scale

FIGURE 7



The profile plot for the Positive Reappraisal sub - scale revealed that there was an increase in the scores between the control group and the experimental group from the pre - assessment to the post - assessment. However, the increase for the experimental group occurred at a higher level.

7.4.5.4 ANOVA results of the within - subjects effect(Seeking Guidance and Support sub - scale)

TABLE 20

Measure	**Wilk's Lambda value**	**Hypothesis df**	**Error df**	**F**	**Significance**
Pre-Post	.703	1	30	12.686	.001
Interaction	.894	1	30	3.556	.069

The results indicated that there was a significant difference between the scores on the pre - test and the post - test measured on the Seeking Guidance and Support sub - scale. Wilk's Lambda = .703, F (1, 30) = 12.686 with a significance value of .001. The interaction effect was not significant for the Seeking Guidance and Support sub - scale, significance value = .069.

7.4.5.5 ANOVA results of the between - subjects effect (Seeking Guidance and Support sub - scale)

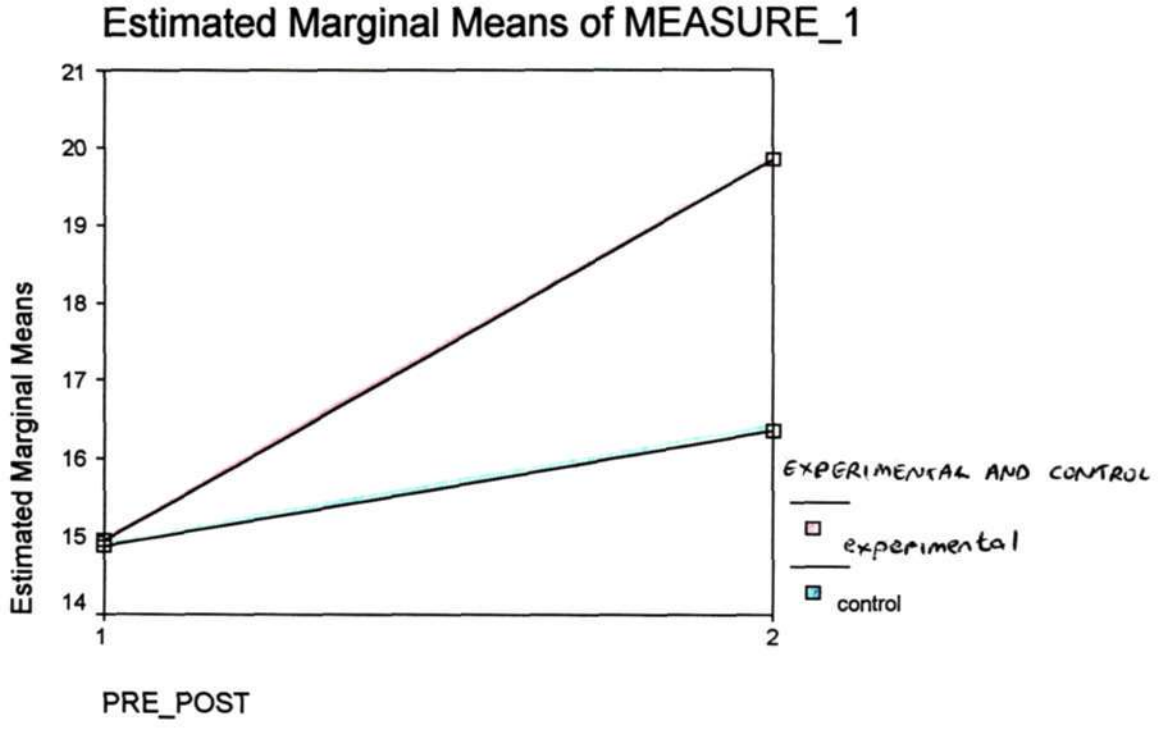
TABLE 21

Measure	**Type III sum of squares**	**df**	**Mean Square**	**F**	**Significance**
Intercept	13084.505	1	13084.505	664.493	.000
Group	37.630	1	37.630	1.911	.177

Although the intercept between the two groups was significant (p = .000), the group significance is, p = .177 which is above the alpha level of .05. Hence, the main effect for the intervention is not significant.

7.4.5.6 Profile Plot - Seeking Guidance and Support sub - scale

FIGURE: 8



The profile plot shows that there was an increase in the scores for the Seeking Guidance and Support sub - scale for both groups between from the pre - assessment to the post - assessment. The increase for the experimental group, however, occurred at a higher level.

7.4.5.7 ANOVA results of the within - subjects effect (Problem Solving sub - scale)

TABLE 22

Measure	Wilk's Lambda value	Hypothesis df	Error df	F	Significance
Pre-Post	.858	1	30	4.964	.034
Interaction	.908	1	30	3.044	.091

The results indicated that there was a significant difference between the assessments at the two time periods. Wilk's Lambda = .858, F (1, 30) = 4.964 with a significance value of .034. The interaction effect, however, was not significant for the Problem Solving sub - scale, with a significance value = .091.

7.4.5.8 ANOVA results of the between - subjects effect (Problem Solving sub - scale)

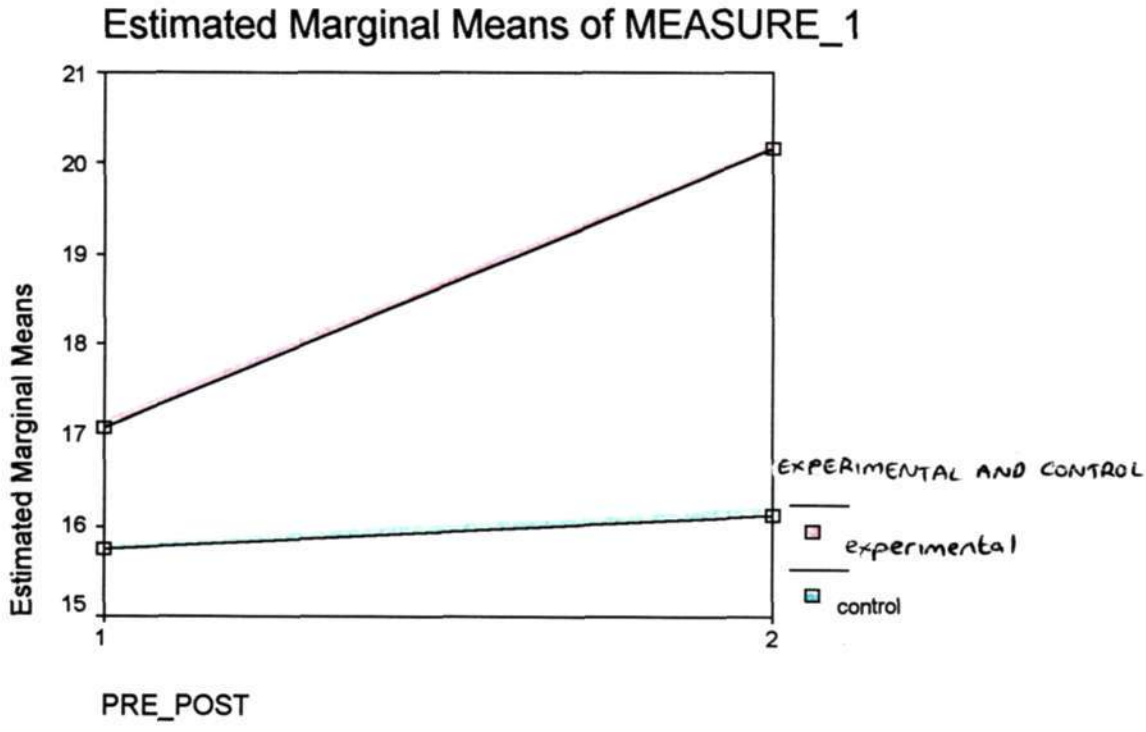
TABLE 23

Measure	Type III sum of squares	df	Mean Square	F	Significance
Intercept	14334.797	1	14334.797	635.513	.000
Group	86.672	1	86.672	3.842	.059

Although the intercept between the two groups was significant, .000, the group significance is .059 which is closely above alpha level of .05. Hence, it can be concluded that the main effect for the group was not significant, but the difference between the means of the two groups is large but not sufficient to be considered significant.

7.4.5.9 Profile Plot - Problem Solving sub - scale

FIGURE: 9



The profile plot the Problem Solving sub - scale shows that there was an increase in the scores for the experimental group from the pre - assessment to the post - assessment, while the scores for the control group increased but very marginally.

7.5 Summary of significant results

TABLE 24

TYPE OF SCALE	ANOVA ANALYSIS	SIGNIFICANCE
Positive Reappraisal sub - scale	between - subjects effect	.036
TSC - 40	within - subjects effect	.014
Positive Reappraisal sub - scale	within - subjects effect	.003
Seeking Guidance and Support	within - subjects effect	.001
Problem Solving sub - scale	within - subjects effect	.034

7.6 Conclusion

The frequency count of the Social Readjustment Rating Scale reveal that there was an increase in response for twenty one of the forty one stressful life events in the scale while four of the life events had a decrease in a'yes' response from the pre - assessment to the post - assessment. The results of the analysis of the IES - R, the TSC - 40 and the CRI - A scales from the pre - assessment to the post - assessment revealed that there are differences between the control group and the experimental group as is indicative from the profile plots of all the scales. However the between - subjects ANOVA of all the sub - scales except the Positive Reappraisal sub - scale did not have any significant differences between the experimental and control groups. This indicated that the means of both groups were not significantly different for the main effect. The within - subject ANOVAs of all the scales also produced varying results. There were significant differences between the two assessment periods for the TSC - 40 total scale, the Positive Reappraisal sub - scale, the Seeking Guidance and Support sub - scale, and the Problem Solving sub - scale. There

is no significant differences in the within - subject ANOVAs for the IES - R scale, the Avoidance sub - scale, the Depressive sub - scale, the Dissociation sub - scale, and the Anxiety sub - scale. Although the changes in the scores of the experimental group did not reach the required levels of significance on most of the sub - scales, the direction of the changes were in a positive direction.

CHAPTER 8: DISCUSSION

8.1 Introduction

The final chapter examines the results of the present study in terms of a) epidemiological research previously conducted in the area; b) the research objectives presented in Chapter 7 and c) the methodological concerns. The structure of the chapter is as follows: a summary of the results with a discussion of the findings for each of the instruments is presented; a consideration of the extent to which the objectives of the study are realized in the results; a consideration of the limitations of the study's design and content construction; recommendations and a conclusion that highlights the major findings and interprets their significance for the programme implemented in this study.

8.2.1 The Social Readjustment Rating Scale

The results of the Social Readjustment Rating scale reveal that the sample group experienced an increase in life - changing events during the period between the first and the final assessments. This was evident from the increased score in the post - assessment. The mean of the group score increased from 167 to 211, for a combined score with the experimental group and the control group. This has consequences for the results of the study. If the programme had any positive effect on trauma symptoms these could be cancelled out by the emotions that might occur as a result of negative life events.

Of interest for the study was the increase in the respondents who have experienced changes in: 1) their financial status; 2) in the number of arguments with family members; 3) in the extent of their church activities; 4) in their sleeping patterns; and in 5) the number of family holidays and outings in which they have participated. The comparative increases in the period from pre to post - assessment were considerable. These changes indicate that there was an increase in the number

of stressful life events at the post assessment, which would influence the measurement on the other scales, as discussed.

The post - assessment had fewer respondents who: 1) were unable to pay their mortgage or loan; 2) had trouble with a loss; 3) took out a small loan and ; 4) had trouble with their boss. These changes were suggestive of more adaptive coping.

8.2.2 The Impact of Event Scale - Revised

8.2.2.1 IES - R - total scale

Symptomatology associated with trauma was addressed in the CSIP in each of the sessions by encouraging the participants in the programme (the experimental group) to talk about the traumatic events they had experienced and the effective stress and trauma management techniques they had developed in the psycho - educational segment of the workshop.

The ANOVA results of the IES - R total scale reveals that there were no significant differences, in the within - subjects and the between - subjects effect, between the means of the control group and the experimental group. However, the significant interaction effect shows that the score changes occurred at a different rate in the two groups. This is evident in the profile plot of the ANOVA results, Figure 1. The experimental group clearly had a decrease in the scores for the IES - R total scale, which indicates that there was a reduction in trauma symptoms after the intervention programme. Figure 1 shows that the control group's trauma symptoms had increased between pre and post - assessment. This means that, while there was a difference in the number of trauma symptoms displayed in the experimental and control groups the difference between the two groups was not significant. This was the case due to the increase in scores for the control group and the decrease in scores for the experimental group, so the means between the two groups was not sufficiently different. Previously discussed literature on coping with trauma emphasises the

importance of working through the reactions of people to serious life events (Foy *et al.*, 1987, in Michelson and Asher, 1987). The intervention programme appeared to have achieved this, as the symptoms of the focus group decreased after the intervention, while the symptoms of the control group, without the intervention, increased.

8.2.2.2 The Avoidance sub - scale

The results of the ANOVA between the experimental and control groups for both the within - subjects effect and the between - subjects effect was not significant. The significant interaction effect, however, shows that there were differences in the changes between the two groups' post - assessment scores and that the changes occurred at varying rates in the two groups. Avoidance is a component of PTSD diagnosis, as highlighted in Criterion C of the DSM - IV TR's (2000, in Kaplan & Saddock, 2003, p.626) diagnostic criteria for PTSD as "persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma". Avoidance of stimuli can occur at several levels: socially, where the person has a diminished interest in social activities or avoids people or activities reminiscent of the event; cognitively' where the person avoids thoughts, feelings or conversations associated with the event, or even behaviourally, where the person has a restricted range of affect.

Avoidance as a symptom of PTSD is managed in the CSIP by encouraging the group to discuss their trauma and its effects on all aspects of their lives. Avoidance is further confronted through the psycho - educational aspects of the programme in ways such as, encouraging better relationships as a support mechanism, educating the participants on relaxation techniques and on anger and conflict management techniques.

The profile plot (Figure 2) of the Avoidance sub - scale indicates a substantial decrease in scores for the Avoidance sub - scale in the experimental group, while there was an increase in the scores for this scale in the control group. This could mean that the CSIP as an intervention strategy may

have contributed to the decrease in the scores for the experimental group. Herman and Schatzow (1987, in Willis, 2002) in their study discovered that group therapy, induces a sense of belonging in participants, which helped in the reduction of isolation. Isolation from others is one of the factors aggravated by avoidance, and it appears that being part of a group programme tends to minimise avoidance. Since the CSIP is a group programme, it can be inferred that the intervention programme resulted in a reduction of avoidance behaviour in the experimental group. The rise in the avoidance scores for the control group shows that the avoidance reduction for the experimental group was not fortuitous.

8.2.3 The Trauma Symptom Checklist - 40

8.2.3.1 The TSC - 40 - total scale

The ways in which the intervention programme attempts to address trauma symptoms was discussed earlier. The results of the total scale for the TSC - 40 show a significant difference between the two groups in the within - subjects effect, and no significant difference between the groups in the between - subjects effect. The difference in the interaction effect between the two groups was also insignificant. The profile plot (Figure 3) of the results for the TSC - 40 reveal a decrease in both the control group and the experimental group for this scale.

This reduction in trauma symptoms for both groups can be attributed to what Kaplan and Saddock (2003) claimed: that 50 percent of PTSD patients recover after about a year, even if the PTSD is untreated. However, it is obvious from the profile plot that the experimental group had a sheerer decrease in scores than the control group, and that this can be attributed to the intervention programme.

8.2.3.2 The Depression sub - scale

It has already been emphasised that mood disturbances like depression and anxiety are common among individuals with PTSD. According to Schiraldi (1989) depression is often associated with lowered self - esteem, hopelessness, shame, loss, pessimism and a sense of being permanently damaged. A further crucial aspect in the treatment of PTSD, previously discussed in this study, is helping the individual regain a feeling of competence and self worth. This treatment would effectively address the depression that some PTSD sufferers experience. The CSIP attempted to address all depressive symptoms in the participants by encouraging them to develop positive relationships with each other as well as with the facilitators. The programme further addressed the symptoms by facilitating better family, social and work relationships and by teaching stress - management techniques.

The ANOVA results of the depression sub - scale reveal no significant difference between the two groups in the within - subjects effect and the between - subjects effect. The difference between the interaction effect in the two groups is also insignificant. The profile plot (Figure 4) of the scale demonstrates decreases in the depression score post - assessment for both the control and the experimental groups. The decrease in the score for the focus group however, is much greater than for the control group. From the greater decrease in the experimental group, it may be deduced that the intervention of the CSIP may have had a more notably positive effect in the reduction of depressive symptoms.

8.2.3.3 The Dissociative sub - scale

Earlier in this study, Nader (2002)'s observation that dissociative disorders developed as a long term effect of exposure to traumatic events was emphasised. She specified it as one of the mental health disturbances resulting from the failure to treat and manage PTSD. The dissociative sub - scale was, therefore, included in this study for purposes of analysis. Addressing dissociation as a

symptom requires allowing the persons gradually to regain association with the trauma at their individual pace. This is addressed in the CSIP by the debriefing process (Sealing Over).

The results of the ANOVA with the dissociation sub - scale indicate a significant difference between the two groups in the interaction effect as well as in the within - subjects effect. There was no significant difference in the between - subjects effect. The profile plot (Figure 5) of the scale reveals a substantial decrease in the scores for the experimental group, while a slight decrease occurred for the control group. Of interest, though, is the experimental group's very high score on the dissociation sub - scale in the pre - assessment, and its greater decrease in this score at post -assessment than that of the control group. The substantial decrease in the scores for the experimental group indicates that the intervention strategy might have contributed to this decrease.

8.2.3.4 The Anxiety sub - scale

Foy *et al.* (1987, in Michelson & Asher, 1987) highlighted supportive therapy as a useful approach, reducing sensitivity to anxiety provoking stimuli in PTSD. The CSIP addressed anxiety symptoms as part of the psycho - educational component of the programme, specifically in session 7 which offers relaxation techniques, sleep management, and anxiety management. Anxiety management, however, formed part of every session of the programme, as each session ended with a relaxation exercise, which deals with an integral aspect of anxiety.

The ANOVA results of the anxiety sub - scale indicate no significant difference between the two groups in the interaction effect, the within - subjects and the between - subjects. The profile plot (Figure 6) is fairly similar to that of the Dissociation sub - scale. There is a marked decrease of the scores on the anxiety sub - scale for the experimental group while a slight decrease occurred for the control group. It seems, therefore, that the CSIP as an intervention strategy was effective in facilitating a marked decrease in the scores for the anxiety sub - scale.

8.2.4 The Coping Response Inventory - Adult

The ability to cope with trauma was formally addressed in the CSIP in session 2, but coping with trauma symptoms was included in the discussions held in each session. Effective strategies for coping through cognitive and behavioural approaches were presented. This was discussed earlier in this study, when reference was made to Lazarus and Folkman (1984) and Moos and Schaefer (1993, in Holahan *et al.*, 1996) who stress that coping successfully in stressful periods involves psychosocial adaptation that encompasses both cognitive and behavioural efforts to reduce or eliminate stressful conditions and the associated emotional distress. The CSIP as the intervention strategy for this study addressed broad positive coping strategies, while the sub - scales measured specific coping strategies. The significant changes for the sub - scales can, therefore, be attributed to the psycho - education component of the programme in which coping positively with stress and trauma is discussed.

8.2.4.1 Positive Reappraisal sub - scale

The ANOVA results of this scale reveals significant differences between the control and experimental groups in the interaction effect, the within - subjects effect as well as the between - subjects effect. This was confirmed on observation of the profile plot (Figure 7) of the scale. As discussed earlier, increases in positive coping strategies in the experimental group can be attributed to all the discussions held throughout the CSIP.

8.2.4.2 The Seeking Guidance and Support sub - scale

The ANOVA results of this scale indicate a significant difference between the two groups for the within - subjects effect. The interaction effect and the between - subjects effect however, did not yield any significant results. The profile plot of the scale (Figure 8) reveals an increase in the

scores for the scale for both the experimental and the control groups. The increase in the scale for the focus group however, occurred at a greater rate.

8.2.4.3 The Problem Solving sub - scale

The ANOVA results for the final scale analysed for this study reveals a significant difference between the two groups in the within - subjects effect. There is no significant interaction effect nor was the between - subjects effect significant. The profile plot for this scale (Figure 9) is similar to that of the Positive Reappraisal and the Seeking Guidance and Support scales. The figure shows an increase in the scores of the scale for both the control and experimental groups, while the increase for the focus group occurs at a higher rate.

The analysis of the three sub - scales of the CRI - A were similar in that, there was a higher rate of increase in the scores for the experimental group in comparison with the slight increase for the control groups for each sub - scale. The difference in increase between the two groups indicates that the CSIP as the intervention strategy, may have instituted a change in the coping styles of the experimental group participants.

8.3 Analysis of the results in terms of the aims of the study and research question

8.3.1 The Aim of the Research

The aim of the study was to evaluate the effectiveness of the Continuous Stress Intervention Programme on trauma symptoms and coping responses. A review of the results of this study by means of the IES - R and the TSC - 40, the two instruments that measured trauma symptoms, showed that there was a decrease in the scores for both these scales for the experimental group in the post - programme assessment. The study also intended to measure the effectiveness of the programme on coping responses. The CRI - A was utilised to measure the coping strategies of the

control group as well as the experimental group. The scales analysed for this study were: the Positive Reappraisal scale, the Seeking Guidance and Support scale and the Problem Solving scale. The scores of all three scales reveal a marked increase for the experimental group in the post - programme assessment. This shows that the experimental groups displayed an increase in positive coping styles after the intervention programme. The increase in the scores for the sub - scale from the pre - intervention to the post - intervention indicates an increase in the experimental group's effective use of this coping strategy. The aim of the study was achieved as the instruments utilised in the study effectively measured trauma symptoms and coping strategies before and after the programme for the experimental group as well as for the control group. The results of the measurement yielded results that could determine whether or not the programme effectively conveyed strategies for coping with trauma.

8.3.2 The research question

The first hypothesis of the study is:
Null Hypothesis 1: Ho - The Continuous Stress Intervention Programme does not have any effect on trauma symptomatology as measured by the IES - R (Weiss & Marmar, 1997) and the TSC - 40 (Brier, 1996).

Alternative Hypothesis 1: H_1 - The Continuous Stress Intervention Programme decreases the trauma symptomatolgy as measured by the IES - R (Weiss & Marmar, 1997) and the TSC - 40 (Brier, 1996).

The results of the IES - R total scale reveals no significant differences between the experimental and the control group in the within - subjects effect and the between - subjects effect, hence Null Hypothesis 1 is accepted. Although the profile plot of the scale shows that the symptomatolgy of the experimental group decreased more substantially than that of the control group after the intervention programme, the means of the groups were not sufficiently different.

The results of the TSC - 40 reveal a significant difference between the groups for the within - subjects effect, and no significant difference between the two groups for the between - subjects effect. This indicates no difference between the two groups for the main effect. As a result, Null Hypothesis 1 is also accepted with the results of the TSC - 40. The means between the control group and the focus group with the TSC - 40 were not significantly different.

Null hypothesis 1 is thus accepted as indicating that CSIP does not decrease the trauma symptomatolgy significantly.

The second hypothesis of the study is:
Null Hypothesis 2: Ho - The Continuous Stress Intervention Programme does not have any effect on the coping strategies as measured by the CRI - A (Moos, 1993).

Null Hypothesis 2: H_1 - The Continuous Stress Intervention Programme increases the positive coping strategies as measured by the CRI - A (Moos, 1993).

The results of the Positive Reappraisal sub - scale reveal a significant difference between the experimental group and the control group in the within - subjects effect and the between - subjects effect. Hence, Null Hypothesis 2 can be rejected for the Positive Reappraisal sub - scale: the programme does increase the use of the positive reappraisal style of coping for the participants of the programme.

The results of the Seeking Guidance and Support sub - scale reveal a significant difference between the two groups in the within - subjects effect, but there is no significant difference between the two groups in the between - subjects effect. Since the main effect between the two groups was not significant, Null Hypothesis 2 has to be accepted for the Seeking Guidance and Support sub - scale.

The results of the Problem Solving sub - scale reveal a significance difference between the pre and the post assessment in the within - subjects effect, but an insignificant difference between the groups in the between - subjects effect for the control and experimental groups. This indicates that Null Hypothesis 2 is accepted for the Problem Solving sub - scale.

8.4 Limitations of the Study

One of the limitations of this study is that the researcher of this study, who is a police employee in the Employee Assistance section, conducted the CSIP with another co - debriefer. It is crucial to acknowledge the police relationship, as this may, because of the facilitator - group relationship formed during the implementation of the programme, have influenced especially the experimental - group results. In the police environment, moreover, the aspect of voluntarism has to be discussed. The police environment is militaristic and employees of higher rank are expected to be obeyed at all times. Although the participants of the group denied that they were conscripted to be part of the programme, consideration needs to be given to the possibility that they could have felt ordered or coerced by higher authority – from whom permission was sought and granted – to implement the programme.

A further limitation of the study was its sample size. The sample, firstly, did not meet ANOVA requirements of equal sample size for the groups being analysed, and the results may, thus, have been effected. Analysis of the data of this study could have been conducted with a paired sample *t* - test, as there were repeated measurements for the control and the experimental groups. This could have yielded more specific significance results for each of the scales. However, the mixed within - between ANOVA yielded an important result, the variance in the groups as well as the interaction between the two groups. This was evident in the profile plots of each scale analysed in the study. The sampling method also was not random, but dictated by convenience, as the police unit taken as a sample in this study operated in groups that did not alter over the course of the

programme. This compromises the generalisation of the results of the study in the benefits of the CSIP for other groups exposed to trauma.

While conducting the programme with the experimental group, several concerns were raised by the participants. Firstly, the participants in all three groups expressed concern that, while they were receiving support from the organisation, their spouses were not getting any support. It was previously noted that police officers often feel misunderstood at home and that this contributes to their domestic problems and intensifies their stress (Marks, 1995). Consequently, a support session for the spouses of the participants was added to the programme. Of interest to the study is that one of the police officers had several spouses who attended this support session (he had a polygamous marital relationship). The session was intended to create a support network among all the spouses attending, and to include an information sharing session on ways in which the family as a unit can deal with the stress and trauma of the police officer. This was also a catharsis session, facilitating the expression of the stress and emotional pain of being the spouse of a police officer in a specialised unit.

A further concern that emerged in the programme sessions was the organisational stress experienced by the police officers. Some of the participants claimed that trauma was easier to manage than organisational stress. As previously stated in this study, organisational stress involves: 1) logistical problems, lack of acknowledgement and support from superiors, 2) lack of trauma support following critical incidents, 3) lack of promotion opportunities, 4) manpower shortages and, 5) very low salaries for low ranking officers. Although the programme acknowledges these stresses, and provides positive stress management techniques to deal with them, the real concerns of the police officers are not dealt with.

One of the concerns was about management problems. It seems that the officers working in this specialised unit are expected to attend practice sessions and meetings on their days off work without monetary or time compensation. In addition, officers who have completed night - shift

duties are expected to attend meetings and practice sessions in spite of their exhaustion and their concentration problems. Their attempts at addressing this problem with the management of the unit were fruitless.

A further concern raised by the police officers was that they were not provided with correct or detailed information from the police call centre, when they respond to call outs. Incorrect or insufficient information places their lives at risk, if, for example, they are not told that the suspects they are pursuing are armed, or if there are several suspects they need to seek out. The police officers also expressed their disappointment at the lack of organisational support when they are involved in shooting incidents or when a suspect is injured when they are carrying out an arrest. They claimed that the system treats them like criminals, even if they are fulfilling the job requirements by defending themselves while they arrest the criminals of our society. The police also, as already noted, receive little or no acknowledgement from the communities they serve, a lack which several of the programme participants find demotivating. Although these were authentic concerns that needed intervention at some level, neither the facilitators of the CSIP nor programme participants have sufficient power within the police system to have these concerns formally addressed. Since the police officers were assured of confidentiality at the outset of the programme, their concerns could be dealt with only within the confines of the group sessions.

As the Social Readjustment Rating scale was not analysed for each respondent, it was impossible to establish if there were any significant changes in any particular participant of the group that could have influenced the results yielded in either of the assessment periods. Holmes and Rahe (1967) developed the scale to measure cumulative stress over a six - month period, but it was instead applied as an indicator of changes for the entire sample of this study. Also, because the scale was not analysed separately for the control group and the experimental group, any significant differences in the lives of the participants in each group between pre - assessment and the post - assessment was foregone in this study.

The study earlier also considered the diagnostic term *Police Trauma Syndrome* formulated by Anderson (1998). If the instruments of the study specifically measured trauma symptomatology as specified under this diagnostic category, one wonders if the symptoms before the programme and after the programme would have yielded results similar to those found in this study. Anderson (1998) claims that police officers are trained to respond behaviourally and not emotionally. The diagnostic category she formulates would have acknowledged this, and treatment strategies would address this variance in trauma symptoms.

The group who participated in the programme was not screened for PTSD before following the programme. Participants varied in trauma symptomatolgy, and the participants who required more intensive intervention had to be referred for individual therapy besides continuing with the programme, in order to accommodate the rest of the group.

8.5 Recommendations

1. A support session for the spouses of the group should be included within the programme structure as the families of the police officers are also affected by their stress and trauma.
2. The participants of the programme need to be screened for PTSD before the programme, so that the content structure of the programme can be adjusted to ensure that the programme is effective for all police officers.
3. Future studies should also ensure matched sample size for the control and experimental groups, and consideration should be given to comparing the effects of the programme on different police units.
4. The programme can be further streamlined, with attention paid to increasing the number of sessions so as to incorporate management of the specific organisational stresses unique to each group.
5. Future studies that involve evaluating the programme should conduct post - programme assessment at least six months following the intervention to ensure that the assessments of

control groups accommodate instinctual coping abilities.

6. Future studies need, finally, to ensure that the analysis of the Social Readjustment Rating scale is conducted for each individual, and not for the entire group.

CHAPTER 9: CONCLUSION

It is believed that the research objective of the study (set out in section 6.1) was achieved. Despite the methodological limitations of the study, the results of the first component, trauma symptoms, revealed a reduction in the trauma symptoms of the experimental group in the post - programme assessment. Even though Null Hypothesis 1 was accepted: the Continuous Stress Intervention programme does not have an effect on trauma symptoms as measured by the IES - R and the TSC - 40. The second objective was also realised, as there was an increase in the positive coping strategies of the focus group, despite Null Hypothesis 2 being accepted for two of the three sub - scales utilised as a measurement of coping strategies for the purposes of this study. Null Hypothesis 2 was: the Continuous Stress Intervention Programme does not have any effect on the coping responses as measured by the CRI - A with the participants of the programme.

A further finding of this study was the need for support for the spouses of the officers. This need was accommodated in the Continuous Stress Intervention Programme, through the facilitation of a support and information sharing session with the spouses of the programme participants. This study revealed the need for the programme to include specific strategies for dealing with the organisational stresses specific to each group that attends.

The decrease in the experimental group's trauma symptomatology and the increase in their positive coping strategies indicate that the programme had an effect on the participants' symptoms of trauma and their coping responses despite the insignificant difference between the experimental and control groups. The possibility that the results could be different if the two groups were numerically matched should be considered.

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APPENDIX A - LETTER REQUESTING PERMISSION TO IMPLEMENT PROGRAMME

SUID-AFRIKAANSE POLISIEDIENS SOUTH AFRICAN POLICE SERVICE

Privaatsak/Private Bag X 9031 PIETERMARITZBURG 3200

Verwysing Reference

Navrae Enquiries Mrs T. Ebrahim

Telefoon Telephone 033-8452708/2723

Fax number Faksnommer 033-8452718

THE AREA COMMISSIONER
HELPING PROFESSIONS
KWAZULU-NATAL MIDLANDS
PIETERMARITZBURG

2004-02-13

The Unit Commander
Dog Unit
KwaZulu Natal Midlands
PIETERMARITZBURG

CONTINUOUS STRESS INTERVENTION PROGRAMME

1. The continuous Stress Intervention Programme was established to enable accessible and effective continuous stress intervention with high risk units.

2. This programme is being offered to your unit as a form of intervention for addressing trauma and stress.

3. The programme is conducted in small groups of 8-10 members for twelve 90 minutes sessions.

4. The sessions are ideally conducted on a weekly or bi-weekly basis.

5. Kindly forward your response to this proposal to Mrs T. Ebrahim at the Helping Professions or contact her at above number.

6. Thanking you.

.....SUPT{F}
F/AREA COMMISSIONER : HELPING PROFESSIONS
E.P. BOTHA

ak/lib12/continuous stress/dog unit

APPENDIX B - QUESTIONNAIRE

PROGRAMME EVALUATION QUESTIONNAIRE

G. SOMETHING ABOUT YOURSELF

1. Sex

- ☐ Male
- ☐ Female

2. Age

- ☐ 18 - 25 years
- ☐ 25 - 30 years
- ☐ 30 - 35 years
- ☐ 35 - 40 years
- ☐ 40 - 45 years
- ☐ 50 +

3. Current Marital Status

- ☐ Married
- ☐ in a long term relationship
- ☐ widowed
- ☐ divorced
- ☐ separated
- ☐ single/never married

4. What is your ethnic origin?

- ☐ Asian
- ☐ African
- ☐ White
- ☐ Coloured
- ☐ Other (please specify)

5. What is your home language?

- ☐ English
- ☐ Afrikaans
- ☐ Zulu
- ☐ Xhosa
- ☐ Sotho (Northern & Southern)
- ☐
- ☐ Tswana
- ☐ Venda
- ☐ Shangaan / Tsonga
- ☐ Ndebele
- ☐
- ☐ Other (please specify)

6. Highest standard of education completed?

- ☐ Standard 5
- ☐ Standard 6
- ☐ Standard 7
- ☐ Standard 8
- ☐ Standard 9
- ☐ Standard 10

7. Formal Qualifications

- ☐ N 3
- ☐ Diploma
- ☐ Three year degree
- ☐ Postgraduate
- ☐ Police Diploma
- ☐ Other (please specify)

8. What is your present rank?

- ☐ Reservist
- ☐ Public Service Act Personnel
- ☐ Constable
- ☐ Sergeant
- ☐ Inspector
- ☐ Captain
- ☐ Superintendent
- ☐ Senior Superintendent
- ☐ Other (please specify)

9. Which of the following statements correctly describe your experience of personal therapy?

- ☐ I have never been in therapy
- ☐ I am currently in therapy
- ☐ I have been in therapy solely during a crisis
- ☐ I do not believe therapy is important

10. Have you ever been directly exposed to one or more traumatic incidences?

- ☐ Yes
- ☐ No

11. If you answered yes to the above question, kindly indicate which of the following traumas you have been directly exposed to: You may mark more than one response. (This question may be experienced as sensitive by some, please answer if you feel comfortable to do so). T

- ☐ Been shot at, in the line of duty
- ☐ Have shot another person, while on duty
- ☐ Was on duty at a gruesome scene
- ☐ Attended to an accident scene
- ☐ Had to carry dead bodies
- ☐ Was assaulted
- ☐ Assaulted another person
- ☐ Was involved in an accident
- ☐ Other (please specify)

12. Did you ever attend a Trauma Debriefing session?

- ☐ Yes
- ☐ No

13. If yes, how many?

14. How many years are you employed in the police?

15. Are you contemplating leaving the police? If so, why ?

B. LIFE EVENTS

Please indicate with an (x) if any of the events listed below have happened to you in the last six months.

Stressful Life Event	**Yes**	**No**
Death of Spouse		
Divorce		
Marital Separation		
Jail Term		
Death of a close family member		
Personal injury or illness		
Marriage		
Fired from job		
Got back together after marital separation		
Change in health of a family member		
Pregnancy		
Sexual Difficulties		
Addition of a new member to family		
Business difficulties or loss		
Change in financial status		
Death of a close friend		
Change to different line of work		
Change in number of arguments with family members		
Assume a high mortgage		

Unable to pay mortgage or loan		
Change in work responsibilities		
Son or daughter leaving home		
Trouble with in-laws		
Outstanding personal achievement		
Spouse stops work		
Begin or end school		
Change in living conditions		
Change of personal habits		
Trouble with loss		
Change in work hours or conditions		
Change in residence		
Change in school		
Change in recreation		
Change in church activities		
Change in social activities		
Took out a small loan		
Change in sleeping patterns		
Change in number of family holidays and outings		
Change in eating habits		
Minor violations of the law		
Trouble with boss		

C. THE IMPACT OF EVENT SCALE - REVISED

When was the last time you experienced a traumatic event?
Below is a list of difficulties people sometimes have after stressful events. Please read each item, and then indicate how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS. If they did not occur during this time, please mark the 'not at all' column.

	Comment	Not at all 0	A little bit 1	Sometimes 2	Often 3	All the time 4
1	Had reminders					
2	Had trouble					
3	Other things about the event					
4	I felt irritable and angry					
5	I avoided letting myself get upset when I thought about it or was reminded of it					
6	I thought about it when I did not mean to					
7	I felt as if it hadn't happened or wasn't real					
8	I stayed away from reminders about it					
9	Pictures about it popped into my mind					
10	I was jumpy and easily startled					
11	I tried not to think about it					
12	I was aware that I still had a lot of feelings about it, but I didn't want to deal with it					
13	My feelings about it were kind of numb					

14	I found myself acting or feeling as though I was back at that time					
15	I had trouble falling off to sleep					
16	I had waves of strong feelings about it					
17	I tried to remove it from my memory					
18	I had trouble concentrating					
19	Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart					
20	I had dreams about it					
21	I felt watchful or on guard					
22	I tried not to talk about it					

D. TRAUMA SYMPTOM CHECKLIST - 40

How often have you experienced each of the following in the last two months?

No	Symptoms	Never 0	Very Little 1	Sometimes 2	Often 3
1	Headaches				
2	Insomnia (trouble getting to sleep)				
3	Weight Loss (without dieting)				
4	Stomach problems				
5	Sexual Problems				
6	Feeling isolated from others				
7	"Flashbacks" (sudden, vivid, distracting memories)				
8	Restless sleep				
9	Low sex drive				

10	Anxiety attacks				
11	Sexual overactivity				
12	Loneliness				
13	Nightmares				
14	"Spacing out" (going away in your mind)				
15	Sadness				
16	Dizziness				
17	Not feeling satisfied with your sex life				
18	Trouble controlling your temper				
19	Waking up early in the morning and can't get back to sleep				
20	Uncontrollable crying				
21	Fear of men				
22	Not feeling rested in the morning				
23	Having sex that you did not enjoy				
24	Trouble getting along with others				
25	Memory problems				
26	Desire to physically hurt yourself				
27	Fear of women				
28	Waking up in the middle of the night				
29	Bad thoughts or feelings during sex				
30	Passing out				
31	Feeling that things are "unreal"				
32	Unnecessary or over-frequent washing				
33	Feelings of inferiority				
34	Feeling tense all the time				
35	Being confused about your sexual feelings				
36	Desire to physically hurt yourself				
37	Feelings of guilt				

38	Feelings that you are not always in your body				
39	Having trouble breathing				
40	Sexual feelings when you shouldn't have them				

E. COPING RESPONSE INVENTORY

Part 1:

This section contains questions about how you manage important problems that come up in your life. Please think about the most important problem or stressful situations you have experienced in the last 12 months (for example, troubles with a relative or friend, the illness or death of a relative or friend, and accident or illness, financial or work problems). Briefly describe the problem in the space provided. If you have not experienced a major problem, list a minor problem that you have had to deal with. Then answer each of the 10 questions about the problem (or situation).

1	2	3	4
Definitely No	Mainly No	Mainly Yes	Definitely Yes

No	Questions	1	2	3	4

1	Have you ever faced a problem like this before ?				
2	Did you know this problem was going to occur?				
3	Did you have enough time to get ready to handle this problem?				
4	When this problem occurred, did you think of it as a threat?				
5	When this problem occurred, did you think of it as a challenge?				
6	Was this problem caused by something you did?				
7	Was this problem caused by something someone else did?				
8	Did anything good come out of dealing with this problem?				
9	Has this problem or situation been resolved?				
10	If the problem has been worked out, did it turn out all right for you?				

Part 2 :

Read each item carefully and indicate how often you engaged in that behaviour in connection with the problem you described in Part 1.

1	2	3	4
Not at all	**Once or twice**	**Sometimes**	**Fairly often**

No	Questions	1	2	3	4
1	Did you think of different ways to deal with the problem?				
2	Did you tell yourself things to make yourself feel better?				
3	Did you talk to your spouse or other relatives about the problem?				
4	Did you make a plan of action and follow it?				
5	Did you try to forget the whole thing?				
6	Did you feel that time would make a difference - that the only thing to do was wait?				
7	Did you try to help others with a similar problem?				
8	Did you take it out on other people when you felt angry or depressed				
9	Did you try to step back from the situation and be more objective?				

10	Did you remind yourself how much worse things could be?				
11	Did you talk with a friend about the problem?				
12	Did you know what had to be done and try hard to make things work?				
13	Did you try not to think about the problem?				
14	Did you realize that you had no control over the problem?				
15	Did you get involved with new activities?				
16	Did you take a chance and do something risky?				
17	Did you go over in your mind what you would say or do ?				
18	Did you try to see the good side of the situation?				
19	Did you talk to a professional person (doctor, lawyer, clergy)?				
20	Did you decide what you wanted and try hard to get it?				
21	Did you daydream and imagine a better time or place than the one you were in?				
22	Did you think that the outcome would be decided by fate?				
23	Did you try to make new friends?				
24	Did you keep away from friends in general?				
25	Did you try to anticipate how things would turn out ?				
26	Did you think how you were much better off than other people with similar problems?				
27	Did you seek help from persons or groups with the same kind of problem?				
28	Did you try at least two different ways to solve the problem?				
29	Did you try to put off thinking about the situation, even though you knew you would have to at some point ?				
30	Did you accept it; nothing could be done?				
31	Did you read more often as a source of enjoyment?				
32	Did you yell or shout to let off steam?				
33	Did you try to find some personal meaning in the situation?				
34	Did you try to tell yourself that things would get better?				

35	Did you try to find out more about the situation?				
36	Did you try to learn to do more things of your own?				
37	Did you wish that the problem would go away or somehow be over with ?				
38	Did you expect the worst possible outcome?				
39	Did you spend more time in recreational activities?				
40	Did you cry to let your feelings out?				
41	Did you try to anticipate the new demands that would be placed on you?				
42	Did you think about how this event could change your life in a positive way?				
43	Did you pray for guidance and/ or strength?				
44	Did you take things a day at a time, one step at a time?				
45	Did you try to deny how serious the problem was?				
46	Did you lose hope that things would never be the same?				
47	Did you turn to work or other activities to help you manage things?				
48	Did you do something that you didn't think would work, but at least you were doing something?				

*********THANK YOU *********

APPENDIX C - SCORING BREAKDOWN OF SRRS

STRESS LIFE EVENT	WEIGHT
Death of Spouse	100
Divorce	73
Marital Separation	65
Jail Term	63
Death of a close family member	63
Personal injury or illness	53
Marriage	50
Fired from job	47
Got back together after marital separation	45
Change in health of a family member	44
Pregnancy	40
Sexual Difficulties	39
Addition of a new member to family	39
Business difficulties or loss	39
Change in financial status	36
Death of a close friend	35
Change to different line of work	31
Change in number of arguments with a family member	30
Assume a high mortgage	29
Unable to pay mortgage or loan	29
Change in work responsibilities	28
Son or daughter leaving home	26
Trouble with in - laws	26

Outstanding personal achievement	25
Spouse stops work	24
Begin or end school	23
Change in living conditions	20
Change of personal habits	20
Trouble with loss	20
Change in work hours or conditions	19
Change in residence	18
Change in school	17
Change in recreation	16
Change in church activities	15
Change in social activities	15
Took out a small loan	13
Change in sleeping patterns	12
Change in number of family holidays and outings	11
Change in eating habits	11
Minor violations of the law	10
Trouble with boss	9

APPENDIX D - ITEM ANALYSIS OF IMPACT OF EVENT SCALE - REVISED

AVOIDANCE SUB - SCALE

5. I avoided letting myself get upset when I thought about it or was reminded of it.
7. I felt as if hadn't happened or wasn't real.
8. I stayed away from reminders of it.
11. I tried not to think about it.
12. I as aware that I still had a lot of feelings about it, but I didn't want to deal with it.
13. My feelings about it were kind of numb.
17. I tried to remove it from my memory.
22. I tried not to think about it.

INTRUSION SUB - SCALE

1. Had reminders
2. Had trouble
3. Other things about the event.
6. I thought about it when I did not mean to.
9. Pictures about it popped into my mind.
14. I found myself acting or feeling as though I was back at that time.
16. I had waves o strong feelings about it.
20. I had dreams about it.

HYPERAROUSAL SUB - SCALE

4. I felt irritable and angry
10. I was jumpy and easily startled.
15. I had trouble falling off to sleep.
18. I had trouble concentrating.

APPENDIX E - ITEM ANALYSIS OF THE TRAUMA SYMPTOM CHECKLIST - 40

DEPRESSION SUB - SCALE

2. Insomnia (trouble getting to sleep).
3. Weight loss (without dieting).
9. Low sex drive.
15. Sadness.
19. Waking up early in the morning and can't get back to sleep.
20. Uncontrollable crying.
26. Desire to physically hurt yourself.
33. Feelings of inferiority.
37. Feelings of guilt.

DISSOCIATION SUB - SCALE

7. "Flashbacks" (sudden, vivid, distracting memories).
14. "Spacing out" (going away in your mind).
16. Dizziness.
25. Memory problems.
31. Feeling that things are "unreal".
38. Feeling that you are not always in your body.

ANXIETY SUB - SCALE

1. Headaches.

4. Stomach problems.
10. Anxiety attacks.
16. Dizziness
21. Fear of men.
27. Fear of women.
32. Unnecessary or over frequent washing.
34. Feeling tense all the time.
39. Having trouble breathing.

19. Reminders of caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.
21. I felt watchful or on guard.

SLEEP DISTURBANCE SUB - SCALE

2. Insomnia (trouble getting to sleep).
8. Restless sleep.
13. Nightmares.
19. Waking up early in the morning and can't get back to sleep.
22. Not feeling rested in the morning.
28. Waking up in the middle of the night.

SEXUAL PROBLEMS SUB - SCALE

5. Sexual problems.
9. Low sex drive.
11. Sexual over activity.
17. Not feeling satisfied with your sex life.

23. Having sex that you didn't enjoy.
29. Bad thoughts or feelings during sex.
35. Being confused about your sexual feelings.
40. Sexual feelings when you shouldn't have them.

APPENDIX F - ITEM ANALYSIS OF THE COPING RESPONSE INVENTORY - ADULT

LOGICAL ANALYSIS SUB - SCALE

1. Did you think of different ways to deal with the problem ?
9. Did you try to step back from the situation and be more objective ?
17. Did you go over in your mind what you would say ?
25. Did you try to anticipate how things would turn out ?
33. Did you try to find some personal meaning in the situation ?
41. Did you try to anticipate the new demands that would be placed on you ?

POSITIVE REAPPRAISAL SUB - SCALE

2. Did you tell yourself things to make yourself feel better ?
10. Did you remind yourself how much things could be ?
18. Did you try to see the good side of the situation ?
26. Did you think how you were better off than other people with similar problems ?
34. Did you try to tell yourself that things would get better ?
42. Did you think about how this event could change your life in a positive way ?

SEEKING GUIDANCE AND SUPPORT SUB - SCALE

3. Did you talk to your spouse or other relatives about the problem ?
11. Did you talk with a friend about the problem ?
19. Did you talk with a professional person (e.g. doctor, lawyer, clergy) ?
27. Did you seek help from persons or groups with the same type of problem ?
35. Did you try to find out more about the situation ?
43. Did you pray for guidance and / or strength ?

PROBLEM SOLVING SUB - SCALE

4. Did you make a plan of action and follow it ?
12. Did you know what had to be done and try hard to make things work ?
20. Did you decide what you wanted and try hard to get it ?
28. Did you try at least to two different ways to solve the problem ?
36. Did you try to learn to do more things on your own ?
44. Did you take things a day at a time, one step at a time ?

COGNITIVE AVOIDANCE SUB - SCALE

5. Did you try to forget the whole thing ?
13. Did you try not to think about the problem ?
21. Did you daydream or imagine a better time or place than the one you were in ?
29. Did you try to put off talking about the situation, even though you knew you would have to at some point ?
37. Did you wish the problem would go away or somehow be over with ?
45. Did you try to deny how serious the problem really was ?

RESIGNED ACCEPTANCE SUB - SCALE

6. Did you feel that time would make a difference - that the only thing to do was wait ?
14. Did you realize that you had no control over the problem ?
22. Did you think that the outcome would be decided by fate ?
30. Did you accept it; nothing could be done ?
38. Did you expect the worst possible outcome ?
46. Did you lose hope that things would ever be the same ?

SEEKING ALTERNATIVE REWARDS SUB - SCALE

7. Did you try to help others with a similar problem ?
15. Did you get involved in new activities ?
23. Did you try to make new friends ?
31. Did you read more often as a source of enjoyment ?
39. Did you spend more time in recreational activities ?
47. Did you turn to work or other activities to help you manage things ?

EMOTIONAL DISCHARGE SUB - SCALE

8. Did you take it out on other people when you felt angry or depressed ?
16. Did you take a chance and do something risky ?
24. Did you keep away from people in general ?
32. Did you yell or shout to let of steam ?
40. Did you cry to let your feelings out ?
48. Did you do something that you didn't think would work, but at least you were doing something ?

APPENDIX G - INTERNAL CONSISTENCY OF ALL THE SCALES

TABLE 25:

SCALES	RELIABILITY: PRE - TEST	RELIABILITY: POST - TEST
Life Event Scale	.7349	.7070
Impact of Event Scale - R (Total)	.9676	.9759
Avoidance sub- scale (IES-R)	.8764	.9333
Intrusion sub - scale (IES-R)	.9367	.9686
Hyper - arousal sub - scale (IES-R)	.9382	.9512
Trauma Symptom Checklist - 40 (Total)	.9299	.9230
Dissociation sub - scale (TSC-40)	.6138	.4651
Anxiety sub - scale (TSC-40)	.6298	.6091
Depression sub - scale (TSC-40)	.7696	.8031
Sleep Disturbance sub - scale (TSC-40)	.9251	.9156
Sexual Dysfunction sub - scale (TSC-40)	.8234	.6252
Coping Response Inventory - Adult form	.6903	.5715
Logical Analysis sub - scale (CRI-A)	.8230	.8135
Positive Reappraisal sub - scale (CRI-A)	.7475	.8601
Seeking Guidance & Support sub - scale (CRI-A)	.7719	.7787
Problem Solving sub - scale (CRI-A)	.8778	.8636
Cognitive Avoidance sub - scale (CRI-A)	.8000	.6665
Resigned Acceptance sub - scale (CRI-A)	.7166	.7256
Seeking Alternative Rewards sub - scale (CRI-A)	.7465	.4772
Emotional Discharge sub - scale (CRI-A)	.6609	.6867

Table 24 : Internal Consistency of Questionnaire

APPENDIX H - FREQUENCY COUNT OF THE SOCIAL READJUSTMENT RATING SCALE

TABLE 26:

Question Number	PRE - ASSESSMENT				POST - ASSESSMENT			
	Frequency Yes	% Yes	Frequency No	% No	Frequency Yes	% Yes	Frequency No	% No
1	2	6.3	30	93.8	2	6.3	30	93.8
2	3	9.4	29	90.6	3	9.4	29	90.6
3	3	9.4	29	90.6	3	9.4	29	90.6
4	0	0	32	100	0	0	32	100
5	9	28.1	23	71.9	9	28.1	23	71.9
6	13	40.6	19	59.4	15	46.9	17	53.1
7	3	9.4	29	90.6	3	9.4	29	90.6
8	0	0	32	100	0	0	32	100
9	0	0	32	100	0	0	32	100
10	4	12.5	28	87.5	6	18.8	26	81.3
11	3	9.4	29	90.6	3	9.4	29	90.6
12	5	15.6	27	84.4	6	18.8	26	81.3
13	0	0	32	100	2	6.3	30	93.8
14	1	3.1	31	96.9	3	9.4	29	90.6
15	6	18.8	26	81.3	11	34.4	21	65.6
16	7	21.9	25	78.1	8	25	24	75
17	6	18.8	26	81.3	6	18.8	26	81.3

18	3	9.4	29	90.6	10	31.3	22	68.8
19	2	6.3	30	93.8	3	9.4	29	90.6
20	12	37.5	20	62.5	6	18.8	26	81.3
21	6	18.8	26	81.3	8	25	24	75
22	1	3.1	31	96.9	1	3.1	31	96.9
23	2	6.3	30	93.8	2	6.3	30	93.8
24	3	9.4	29	90.6	4	12.5	28	87.5
25	2	6.3	30	93.8	2	6.3	30	93.8
26	0	0	32	100	0	0	32	100
27	2	6.3	30	93.8	7	21.9	25	78.1
28	6	18.8	26	81.3	9	28.1	23	71.9
29	5	15.6	27	84.4	4	12.5	28	87.5
30	5	15.6	27	84.4	7	21.9	25	78.1
31	2	6.3	30	93.8	2	6.3	30	93.8
32	0	0	32	100	0	0	32	100
33	3	9.4	29	90.6	3	9.4	29	90.6
34	2	6.3	30	93.8	6	18.8	26	81.3
35	3	9.4	29	90.6	5	15.6	27	84.4
36	12	37.5	20	62.5	9	28.1	23	71.9
37	12	37.5	20	62.5	18	56.3	14	43.8
38	3	9.4	29	90.6	7	21.9	25	78.1
39	11	34.4	21	65.6	13	40.6	19	59.4
40	1	3.1	31	96.9	2	6.3	30	93.8
41	4	12.5	28	87.5	3	9.4	29	90.6

The scales that increased from the pre - assessment to the post - assessment were:

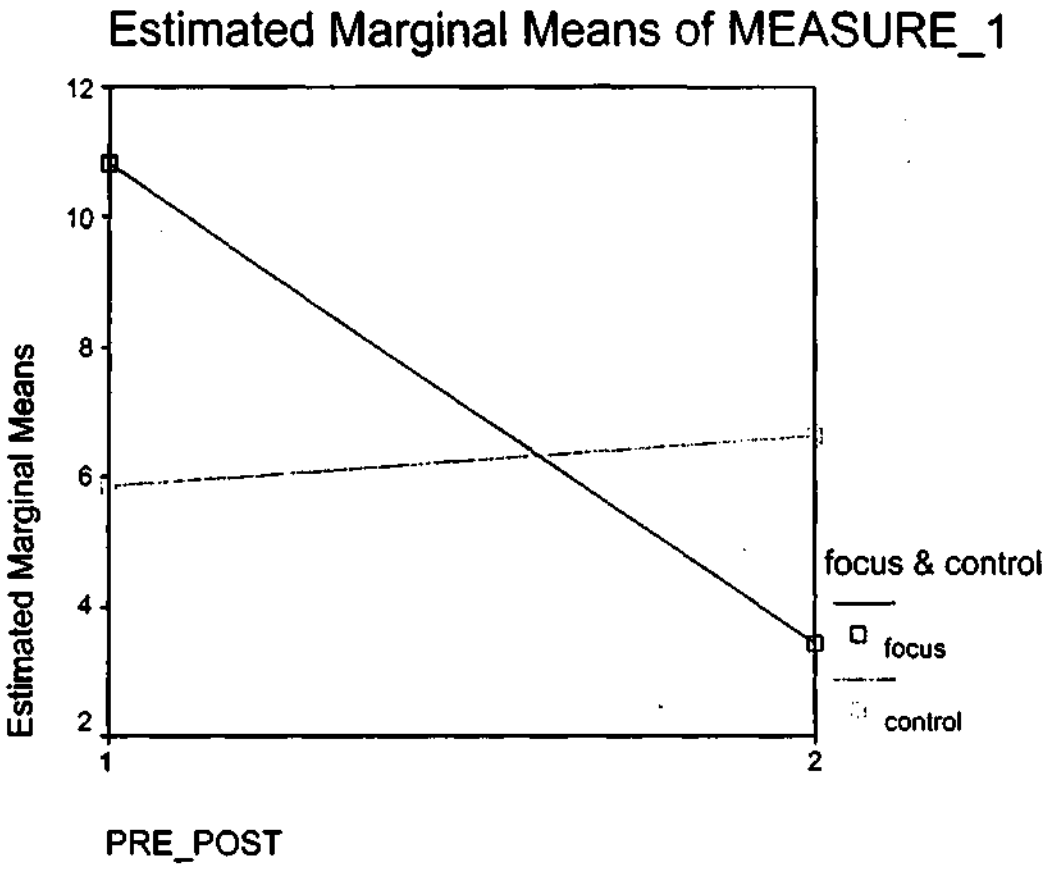
- Question 6 - "Personal injury or illness" - 40.6 % to 46.9%
- Question 10 - "Change in health of a family member" - 12.5 % to 18.8 %
- Question 12 - "Sexual Difficulties" - 15.6 % to 18.8 %
- Question 13 - "Addition of a new member to family" - 0 % to 6.3 %
- Question 14 - "Business difficulties or loss" - 3.1 % to 9.4 %
- Question 15 - "Change in financial status" - 18.8 % to 34.4 %
- Question 16 - "Death of a close friend" - 21.9 % to 25 %
- Question 18 -"Change in the number of arguments with family members"- 9.4 % to 31.3 %
- Question 19 - "Assume a high mortgage" - 6.3 % to 9.4 %
- Question 21 - "Change in work responsibilities" 18.8 % to 25 %
- Question 27 - "Change in living conditions" 6.3 % to 21.9 %
- Question 28 - "Change of personal habits" 18.8 % to 28.1 %
- Question 30 - "Change in work hours or conditions" - 15.6 % to 21.9 %
- Question 34 - "Change in Church activities" - 6.3 % to 18.8 %
- Question 35 - "Change in social activities" - 9.4 % to 15.6 %
- Question 37 - "Change in sleeping patterns" - 37.5 % to 56.3 %
- Question 38 - "Change number of family holidays and outings" - 9.4 % to 21.9 %
- Question 39 - "Change in eating habits" - 34.4 % to 40.6 %
- Question 40 Minor violations of the law" - 3.1 % to 6.3 %

Decrease in 'Yes' responses from the pre - assessment to the post - assessment:

- Question 20 - "Unable to pay mortgage or loan" - 37.5 % to 18.8 %
- Question 29 - "Trouble with loss" - 15.6 % to 12.5 %
- Question 36 - "Took out a small loan" - 37.5 % to 28.1 %
- Question 41 - "Trouble with boss" - 12.5 % to 9.4 %

APPENDIX I - ANOVA RESULTS OF THE SCALES ANALYSED IN THE STUDY

Profile Plots



General Linear Model

Within-Subjects Factors

Measure: MEASURE_1

PRE_POST	Dependent Variable
1	IES_TOTL
2	P_IES_TL

Between-Subjects Factors

		Value Label	N
focus & control	1	focus	24
	2	control	8

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.
PRE_POST	Pillai's Trace	.096	3.192(a)	1.000	30.000	.084
	Wilks' Lambda	.904	3.192(a)	1.000	30.000	.084
	Hotelling's Trace	.106	3.192(a)	1.000	30.000	.084
	Roy's Largest Root	.106	3.192(a)	1.000	30.000	.084
PRE_POST * GROUP	Pillai's Trace	.214	8.173(a)	1.000	30.000	.008
	Wilks' Lambda	.786	8.173(a)	1.000	30.000	.008
	Hotelling's Trace	.272	8.173(a)	1.000	30.000	.008
	Roy's Largest Root	.272	8.173(a)	1.000	30.000	.008

a Exact statistic
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Mauchly's Test of Sphericity(b)

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon(a)		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
PRE_POST	1.000	.000	0	.	1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.
a May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Sphericity Assumed	875.521	1	875.521	3.192	.084
	Greenhouse-Geisser	875.521	1.000	875.521	3.192	.084
	Huynh-Feldt	875.521	1.000	875.521	3.192	.084
	Lower-bound	875.521	1.000	875.521	3.192	.084
PRE_POST * GROUP	Sphericity Assumed	2241.333	1	2241.333	8.173	.008
	Greenhouse-Geisser	2241.333	1.000	2241.333	8.173	.008
	Huynh-Feldt	2241.333	1.000	2241.333	8.173	.008
	Lower-bound	2241.333	1.000	2241.333	8.173	.008
Error(PRE_POST)	Sphericity Assumed	8227.417	30	274.247		
	Greenhouse-Geisser	8227.417	30.000	274.247		
	Huynh-Feldt	8227.417	30.000	274.247		
	Lower-bound	8227.417	30.000	274.247		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

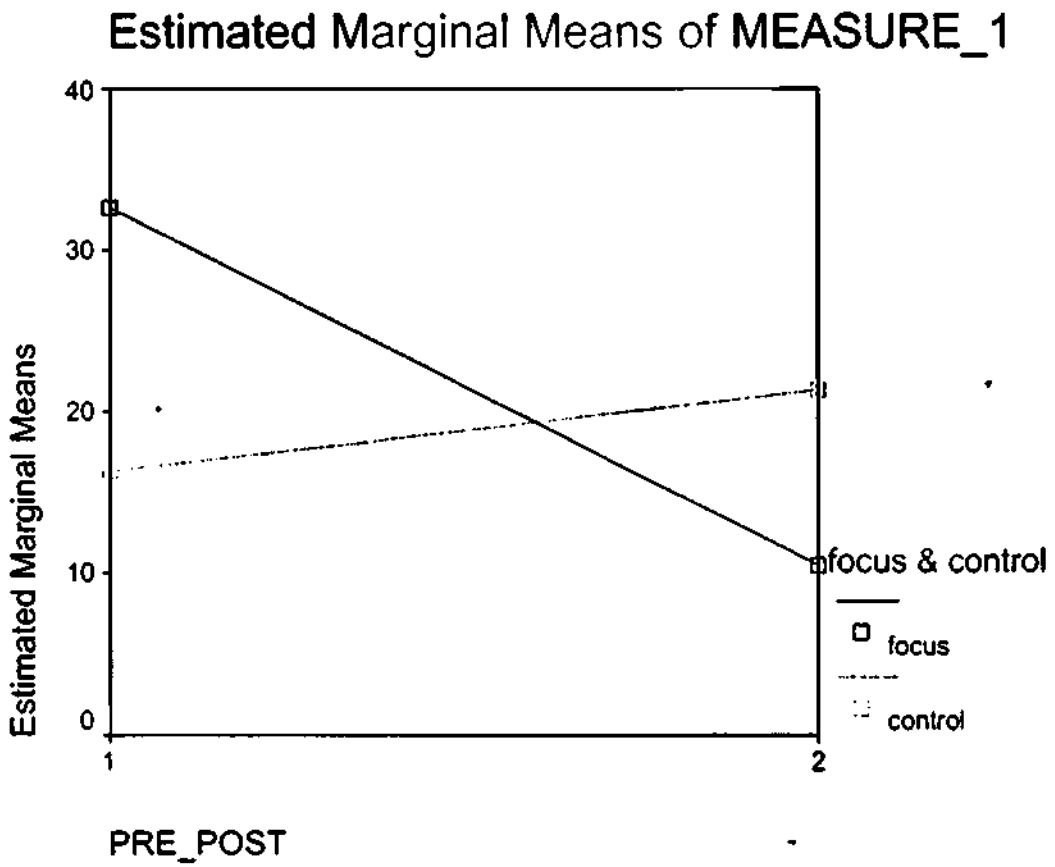
Source	PRE_POST	Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Linear	875.521	1	875.521	3.192	.084
PRE_POST * GROUP	Linear	2241.333	1	2241.333	8.173	.008
Error(PRE_POST)	Linear	8227.417	30	274.247		

Tests of Between-Subjects Effects

Measure: MEASURE_1
Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	19521.333	1	19521.333	36.627	.000
GROUP	88.021	1	88.021	.165	.687
Error	15989.417	30	532.981		

Profile Plots



General Linear Model

Within-Subjects Factors

Measure: MEASURE_1

General Linear Model

Within-Subjects Factors

Measure: MEASURE_1

PRE_POST	Dependent Variable
1	AVOIDNCE
2	P_AVOID

Between-Subjects Factors

		Value Label	N
focus & control	1	focus	24
	2	control	8

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.
PRE_POST	Pillai's Trace	.051	1.628(a)	1.000	30.000	.212
	Wilks' Lambda	.949	1.628(a)	1.000	30.000	.212
	Hotelling's Trace	.054	1.628(a)	1.000	30.000	.212
	Roy's Largest Root	.054	1.628(a)	1.000	30.000	.212
PRE_POST * GROUP	Pillai's Trace	.211	8.034(a)	1.000	30.000	.008
	Wilks' Lambda	.789	8.034(a)	1.000	30.000	.008
	Hotelling's Trace	.268	8.034(a)	1.000	30.000	.008
	Roy's Largest Root	.268	8.034(a)	1.000	30.000	.008

a Exact statistic
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Mauchly's Test of Sphericity(b)

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon(a)		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
PRE_POST	1.000	.000	0	.	1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.
a May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Sphericity Assumed	66.505	1	66.505	1.628	.212
	Greenhouse-Geisser	66.505	1.000	66.505	1.628	.212
	Huynh-Feldt	66.505	1.000	66.505	1.628	.212
	Lower-bound	66.505	1.000	66.505	1.628	.212
PRE_POST * GROUP	Sphericity Assumed	328.130	1	328.130	8.034	.008
	Greenhouse-Geisser	328.130	1.000	328.130	8.034	.008
	Huynh-Feldt	328.130	1.000	328.130	8.034	.008
	Lower-bound	328.130	1.000	328.130	8.034	.008
Error(PRE_POST)	Sphericity Assumed	1225.354	30	40.845		
	Greenhouse-Geisser	1225.354	30.000	40.845		
	Huynh-Feldt	1225.354	30.000	40.845		
	Lower-bound	1225.354	30.000	40.845		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

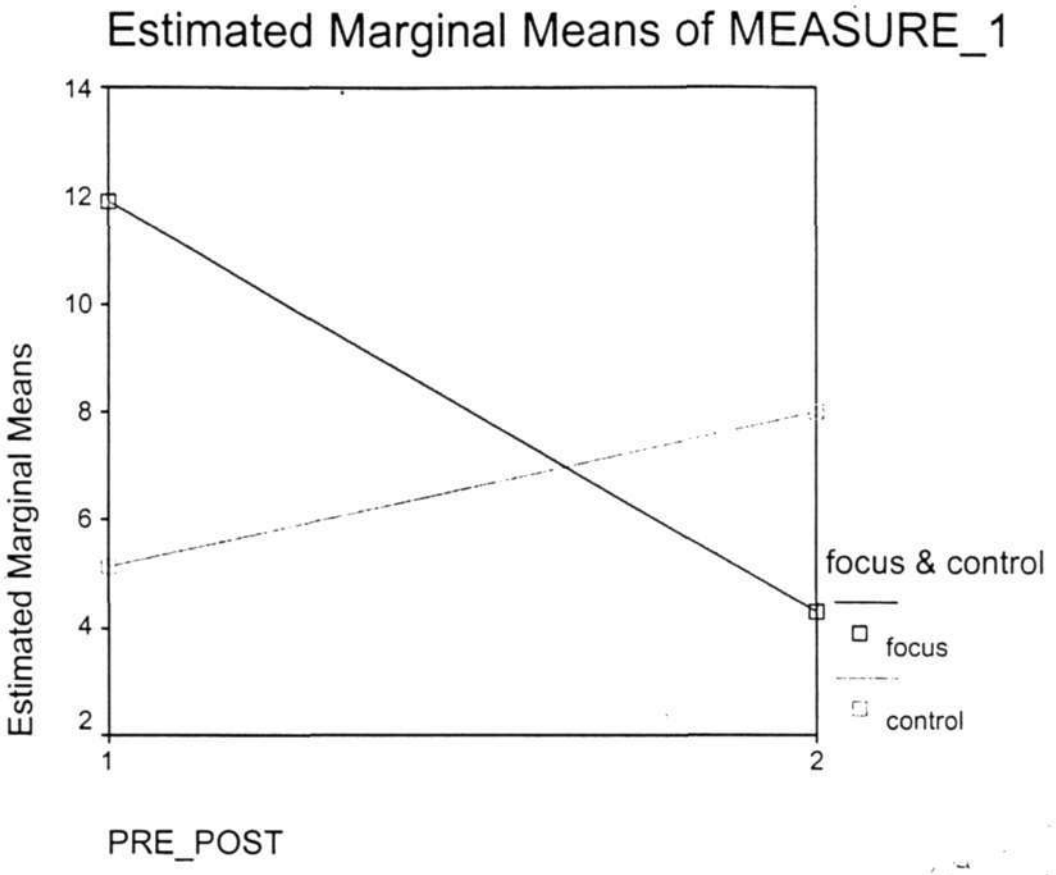
Source	PRE_POST	Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Linear	66.505	1	66.505	1.628	.212
PRE_POST * GROUP	Linear	328.130	1	328.130	8.034	.008
Error(PRE_POST)	Linear	1225.354	30	40.845		

Tests of Between-Subjects Effects

Measure: MEASURE_1
Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	2574.005	1	2574.005	35.998	.000
GROUP	27.755	1	27.755	.388	.538
Error	2145.104	30	71.503		

Profile Plots



General Linear Model

Within-Subjects Factors

Measure: MEASURE_1

PRE_POST	Dependent Variable
1	INTRUSON
2	P_INTRUS

Between-Subjects Factors

		Value Label	N
focus & control	1	focus	24
	2	control	8

General Linear Model

Within-Subjects Factors

Measure: MEASURE_1

PRE_POST	Dependent Variable
1	TS_TOTAL
2	PT_TOTAL

Between-Subjects Factors

		Value Label	N
focus & control	1	focus	24
	2	control	8

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.
PRE_POST	Pillai's Trace	.185	6.825(a)	1.000	30.000	.014
	Wilks' Lambda	.815	6.825(a)	1.000	30.000	.014
	Hotelling's Trace	.228	6.825(a)	1.000	30.000	.014
	Roy's Largest Root	.228	6.825(a)	1.000	30.000	.014
PRE_POST * GROUP	Pillai's Trace	.103	3.434(a)	1.000	30.000	.074
	Wilks' Lambda	.897	3.434(a)	1.000	30.000	.074
	Hotelling's Trace	.114	3.434(a)	1.000	30.000	.074
	Roy's Largest Root	.114	3.434(a)	1.000	30.000	.074

a Exact statistic
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Mauchly's Test of Sphericity(b)

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon(a)		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
PRE_POST	1.000	.000	0	.	1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.
a May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Sphericity Assumed	1386.750	1	1386.750	6.825	.014
	Greenhouse-Geisser	1386.750	1.000	1386.750	6.825	.014

	Huynh-Feldt	1386.750	1.000	1386.750	6.825	.014
	Lower-bound	1386.750	1.000	1386.750	6.825	.014
PRE_POST * GROUP	Sphericity Assumed	697.687	1	697.687	3.434	.074
	Greenhouse-Geisser	697.687	1.000	697.687	3.434	.074
	Huynh-Feldt	697.687	1.000	697.687	3.434	.074
	Lower-bound	697.687	1.000	697.687	3.434	.074
Error(PRE_POST)	Sphericity Assumed	6095.250	30	203.175		
	Greenhouse-Geisser	6095.250	30.000	203.175		
	Huynh-Feldt	6095.250	30.000	203.175		
	Lower-bound	6095.250	30.000	203.175		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

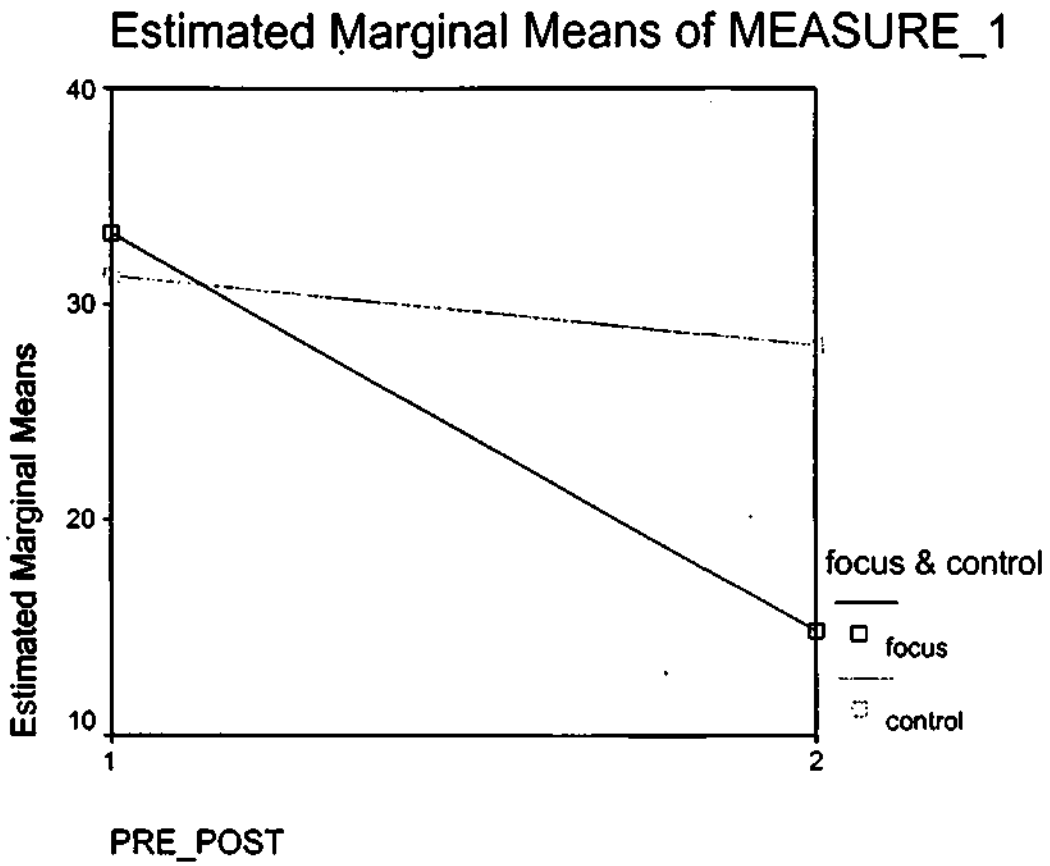
Source	PRE_POST	Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Linear	1386.750	1	1386.750	6.825	.014
PRE_POST * GROUP	Linear	697.687	1	697.687	3.434	.074
Error(PRE_POST)	Linear	6095.250	30	203.175		

Tests of Between-Subjects Effects

Measure: MEASURE_1
Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	34668.750	1	34668.750	69.226	.000
GROUP	379.687	1	379.687	.758	.391
Error	15024.250	30	500.808		

Profile Plots



General Linear Model

Within-Subjects Factors

Measure: MEASURE_1

PRE_POST	Dependent Variable
1	LE_TOTAL
2	PLETOTAL

Between-Subjects Factors

		Value Label	N
focus & control	1	focus	24
	2	control	8

General Linear Model

Within-Subjects Factors

Measure: MEASURE_1

PRE_POST	Dependent Variable
1	TSDEPRES
2	PT_DEPRS

Between-Subjects Factors

		Value Label	N
focus & control	1	focus	24
	2	control	8

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.
PRE_POST	Pillai's Trace	.118	3.999(a)	1.000	30.000	.055
	Wilks' Lambda	.882	3.999(a)	1.000	30.000	.055
	Hotelling's Trace	.133	3.999(a)	1.000	30.000	.055
	Roy's Largest Root	.133	3.999(a)	1.000	30.000	.055
PRE_POST * GROUP	Pillai's Trace	.067	2.158(a)	1.000	30.000	.152
	Wilks' Lambda	.933	2.158(a)	1.000	30.000	.152
	Hotelling's Trace	.072	2.158(a)	1.000	30.000	.152
	Roy's Largest Root	.072	2.158(a)	1.000	30.000	.152

a Exact statistic
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Mauchly's Test of Sphericity(b)

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon(a)		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
PRE_POST	1.000	.000	0	.	1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.
a May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Sphericity Assumed	66.505	1	66.505	3.999	.055
	Greenhouse-	66.505	1.000	66.505	3.999	.055

	Geisser					
	Huynh-Feldt	66.505	1.000	66.505	3.999	.055
	Lower-bound	66.505	1.000	66.505	3.999	.055
PRE_POST * GROUP	Sphericity Assumed	35.880	1	35.880	2.158	.152
	Greenhouse-Geisser	35.880	1.000	35.880	2.158	.152
	Huynh-Feldt	35.880	1.000	35.880	2.158	.152
	Lower-bound	35.880	1.000	35.880	2.158	.152
Error(PRE_POST)	Sphericity Assumed	498.854	30	16.628		
	Greenhouse-Geisser	498.854	30.000	16.628		
	Huynh-Feldt	498.854	30.000	16.628		
	Lower-bound	498.854	30.000	16.628		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

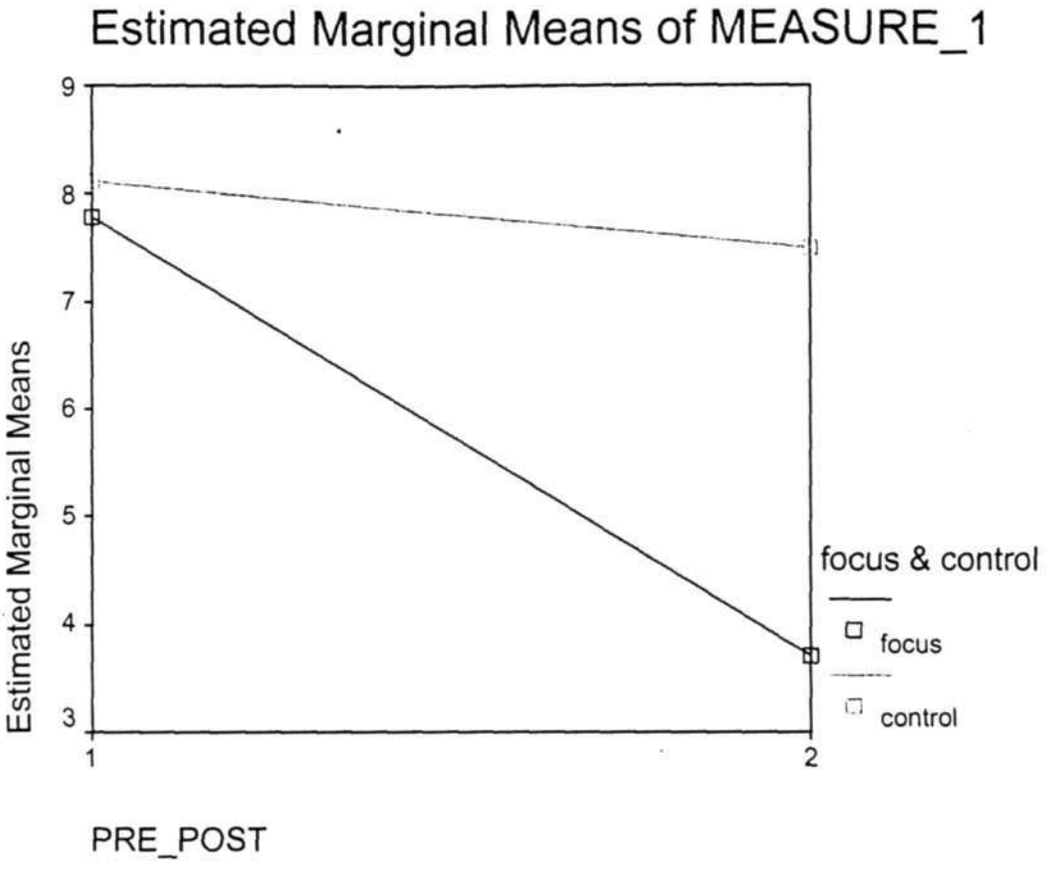
Source	PRE_POST	Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Linear	66.505	1	66.505	3.999	.055
PRE_POST * GROUP	Linear	35.880	1	35.880	2.158	.152
Error(PRE_POST)	Linear	498.854	30	16.628		

Tests of Between-Subjects Effects

Measure: MEASURE_1
Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	2207.297	1	2207.297	57.335	.000
GROUP	51.047	1	51.047	1.326	.259
Error	1154.937	30	38.498		

Profile Plots



General Linear Model

Within-Subjects Factors

Measure: MEASURE_1

PRE_POST	Dependent Variable
1	TSDISSOC
2	PT_DISSO

Between-Subjects Factors

		Value Label	N
focus & control	1	focus	24
	2	control	8

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.
PRE_POST	Pillai's Trace	.179	6.561(a)	1.000	30.000	.016
	Wilks' Lambda	.821	6.561(a)	1.000	30.000	.016

	Hotelling's Trace	.219	6.561(a)	1.000	30.000	.016
	Roy's Largest Root	.219	6.561(a)	1.000	30.000	.016
PRE_POST * GROUP	Pillai's Trace	.133	4.605(a)	1.000	30.000	.040
	Wilks' Lambda	.867	4.605(a)	1.000	30.000	.040
	Hotelling's Trace	.154	4.605(a)	1.000	30.000	.040
	Roy's Largest Root	.154	4.605(a)	1.000	30.000	.040

a Exact statistic
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Mauchly's Test of Sphericity(b)

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon(a)		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
PRE_POST	1.000	.000	0	.	1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.
a May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Sphericity Assumed	28.521	1	28.521	6.561	.016
	Greenhouse-Geisser	28.521	1.000	28.521	6.561	.016
	Huynh-Feldt	28.521	1.000	28.521	6.561	.016
	Lower-bound	28.521	1.000	28.521	6.561	.016
PRE_POST * GROUP	Sphericity Assumed	20.021	1	20.021	4.605	.040
	Greenhouse-Geisser	20.021	1.000	20.021	4.605	.040
	Huynh-Feldt	20.021	1.000	20.021	4.605	.040
	Lower-bound	20.021	1.000	20.021	4.605	.040
Error(PRE_POST)	Sphericity Assumed	130.417	30	4.347		
	Greenhouse-Geisser	130.417	30.000	4.347		
	Huynh-Feldt	130.417	30.000	4.347		
	Lower-bound	130.417	30.000	4.347		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	PRE_POST	Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Linear	28.521	1	28.521	6.561	.016
PRE_POST * GROUP	Linear	20.021	1	20.021	4.605	.040
Error(PRE_POST)	Linear	130.417	30	4.347		

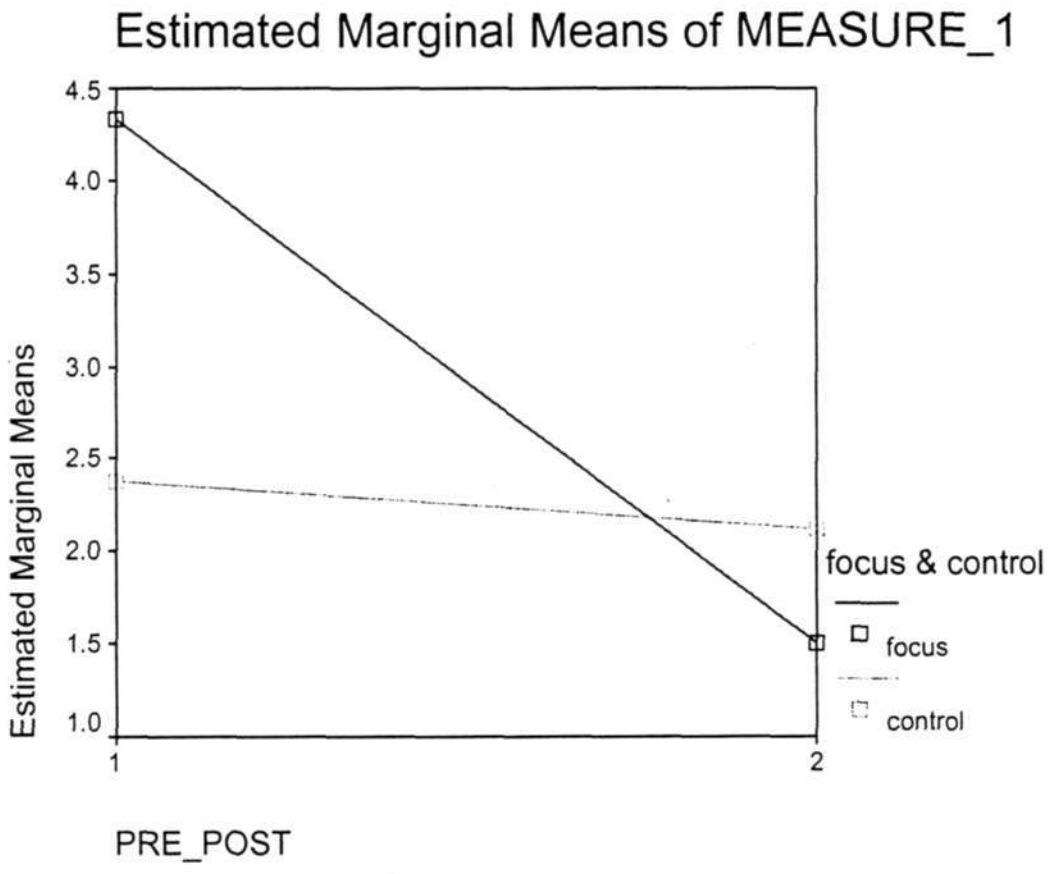
Tests of Between-Subjects Effects

Measure: MEASURE_1
Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.

Intercept	320.333	1	320.333	31.033	.000
GROUP	5.333	1	5.333	.517	.478
Error	309.667	30	10.322		

Profile Plots



General Linear Model

Within-Subjects Factors

Measure: MEASURE_1

PRE_POST	Dependent Variable
1	TSANXITY
2	PT_ANXTY

Between-Subjects Factors

		Value Label	N
focus & control	1	focus	24
	2	control	8

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.
PRE_POST	Pillai's Trace	.091	2.989(a)	1.000	30.000	.094
	Wilks' Lambda	.909	2.989(a)	1.000	30.000	.094
	Hotelling's Trace	.100	2.989(a)	1.000	30.000	.094
	Roy's Largest Root	.100	2.989(a)	1.000	30.000	.094
PRE_POST * GROUP	Pillai's Trace	.091	2.989(a)	1.000	30.000	.094
	Wilks' Lambda	.909	2.989(a)	1.000	30.000	.094
	Hotelling's Trace	.100	2.989(a)	1.000	30.000	.094
	Roy's Largest Root	.100	2.989(a)	1.000	30.000	.094

a Exact statistic
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Mauchly's Test of Sphericity(b)

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon(a)		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
PRE_POST	1.000	.000	0	.	1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.
a May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Sphericity Assumed	27.000	1	27.000	2.989	.094
	Greenhouse-Geisser	27.000	1.000	27.000	2.989	.094
	Huynh-Feldt	27.000	1.000	27.000	2.989	.094
	Lower-bound	27.000	1.000	27.000	2.989	.094
PRE_POST * GROUP	Sphericity Assumed	27.000	1	27.000	2.989	.094
	Greenhouse-Geisser	27.000	1.000	27.000	2.989	.094
	Huynh-Feldt	27.000	1.000	27.000	2.989	.094
	Lower-bound	27.000	1.000	27.000	2.989	.094
Error(PRE_POST)	Sphericity Assumed	271.000	30	9.033		
	Greenhouse-Geisser	271.000	30.000	9.033		
	Huynh-Feldt	271.000	30.000	9.033		
	Lower-bound	271.000	30.000	9.033		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

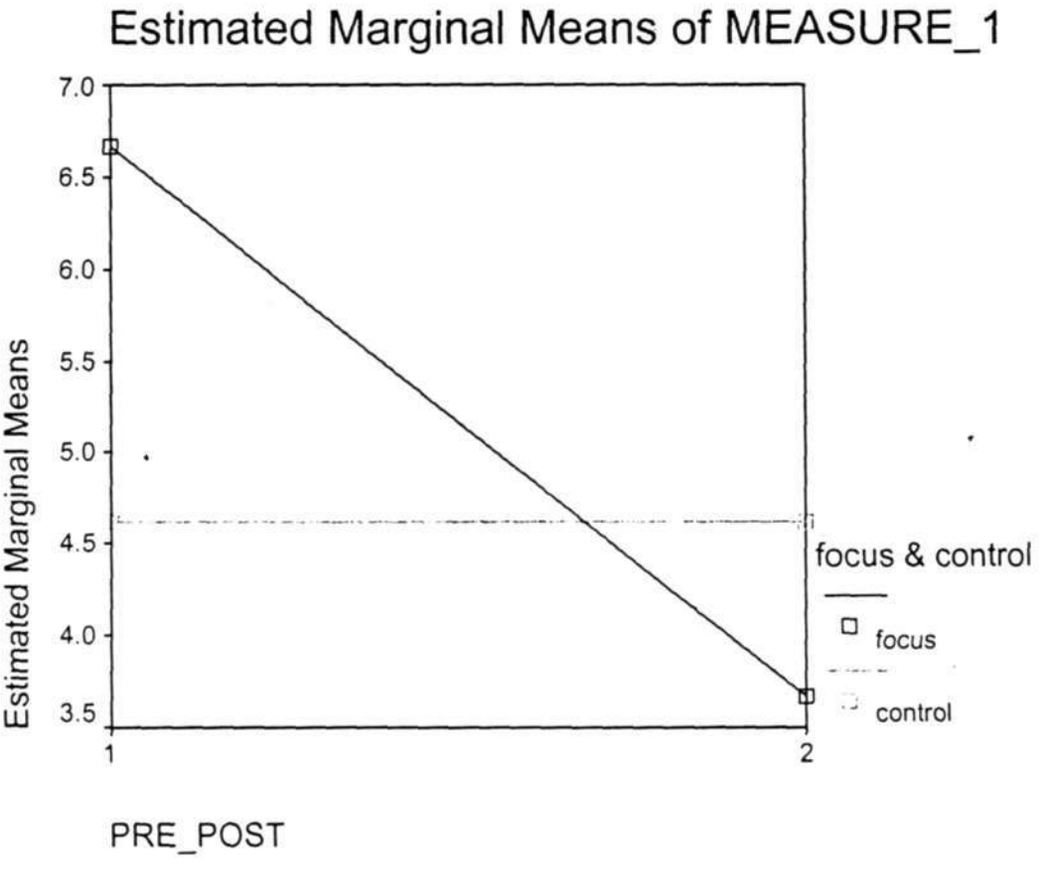
Source	PRE_POST	Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Linear	27.000	1	27.000	2.989	.094
PRE_POST * GROUP	Linear	27.000	1	27.000	2.989	.094
Error(PRE_POST)	Linear	271.000	30	9.033		

Tests of Between-Subjects Effects

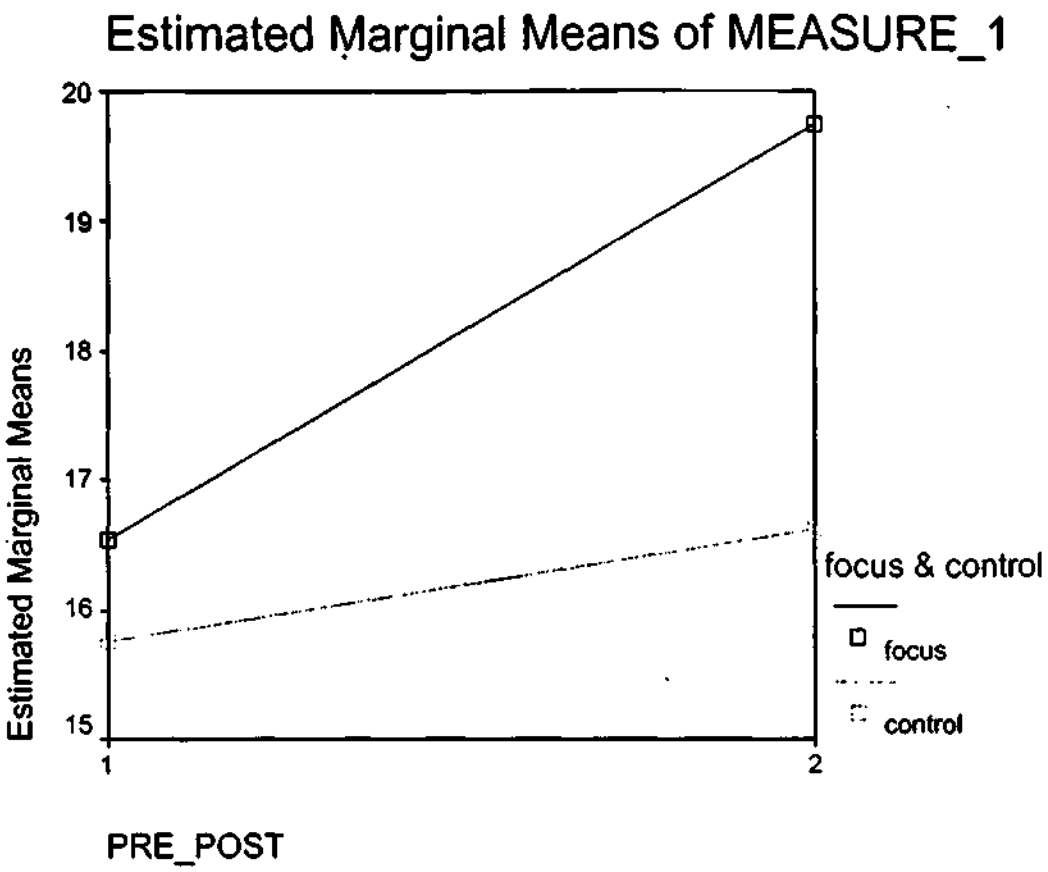
Measure: MEASURE_1
Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	1150.521	1	1150.521	55.723	.000
GROUP	3.521	1	3.521	.171	.683
Error	619.417	30	20.647		

Profile Plots



Profile Plots



General Linear Model

Within-Subjects Factors

Measure: MEASURE_1

PRE_POST	Dependent Variable
1	CRPOSREP
2	P_POSREP

Between-Subjects Factors

		Value Label	N
focus & control	1	focus	24
	2	control	8

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.
PRE_POST	Pillai's Trace	.263	10.711(a)	1.000	30.000	.003
	Wilks' Lambda	.737	10.711(a)	1.000	30.000	.003
	Hotelling's Trace	.357	10.711(a)	1.000	30.000	.003
	Roy's Largest Root	.357	10.711(a)	1.000	30.000	.003
PRE_POST * GROUP	Pillai's Trace	.094	3.106(a)	1.000	30.000	.088
	Wilks' Lambda	.906	3.106(a)	1.000	30.000	.088
	Hotelling's Trace	.104	3.106(a)	1.000	30.000	.088
	Roy's Largest Root	.104	3.106(a)	1.000	30.000	.088

a Exact statistic
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Mauchly's Test of Sphericity(b)

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon(a)		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
PRE_POST	1.000	.000	0	.	1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.
a May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Sphericity Assumed	71.297	1	71.297	10.711	.003
	Greenhouse-Geisser	71.297	1.000	71.297	10.711	.003
	Huynh-Feldt	71.297	1.000	71.297	10.711	.003
	Lower-bound	71.297	1.000	71.297	10.711	.003
PRE_POST * GROUP	Sphericity Assumed	20.672	1	20.672	3.106	.088
	Greenhouse-Geisser	20.672	1.000	20.672	3.106	.088
	Huynh-Feldt	20.672	1.000	20.672	3.106	.088
	Lower-bound	20.672	1.000	20.672	3.106	.088
Error(PRE_POST)	Sphericity Assumed	199.688	30	6.656		
	Greenhouse-Geisser	199.688	30.000	6.656		
	Huynh-Feldt	199.688	30.000	6.656		
	Lower-bound	199.688	30.000	6.656		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

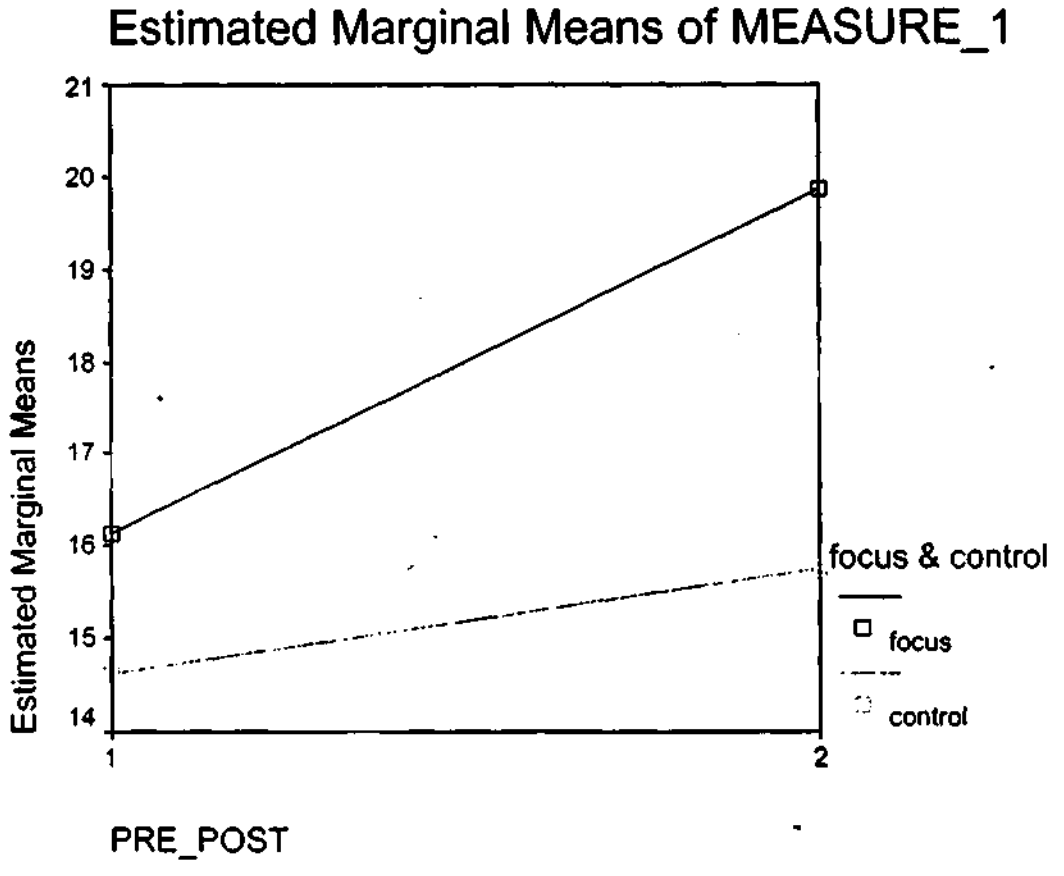
Source	PRE_POST	Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Linear	71.297	1	71.297	10.711	.003
PRE_POST * GROUP	Linear	20.672	1	20.672	3.106	.088
Error(PRE_POST)	Linear	199.687	30	6.656		

Tests of Between-Subjects Effects

Measure: MEASURE_1
Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	13216.922	1	13216.922	673.259	.000
GROUP	94.922	1	94.922	4.835	.036
Error	588.937	30	19.631		

Profile Plots



General Linear Model

Within-Subjects Factors

Measure: MEASURE_1

PRE_POST	Dependent Variable
1	CR_GUID
2	P_GUIDNC

Between-Subjects Factors

		Value Label	N
focus & control	1	focus	24
	2	control	8

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.
PRE_POST	Pillai's Trace	.297	12.686(a)	1.000	30.000	.001
	Wilks' Lambda	.703	12.686(a)	1.000	30.000	.001
	Hotelling's Trace	.423	12.686(a)	1.000	30.000	.001
	Roy's Largest Root	.423	12.686(a)	1.000	30.000	.001
PRE_POST * GROUP	Pillai's Trace	.106	3.556(a)	1.000	30.000	.069
	Wilks' Lambda	.894	3.556(a)	1.000	30.000	.069
	Hotelling's Trace	.119	3.556(a)	1.000	30.000	.069
	Roy's Largest Root	.119	3.556(a)	1.000	30.000	.069

a Exact statistic
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Mauchly's Test of Sphericity(b)

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon(a)		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
PRE_POST	1.000	.000	0	.	1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.
a May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Sphericity Assumed	121.922	1	121.922	12.686	.001
	Greenhouse-Geisser	121.922	1.000	121.922	12.686	.001
	Huynh-Feldt	121.922	1.000	121.922	12.686	.001
	Lower-bound	121.922	1.000	121.922	12.686	.001
PRE_POST * GROUP	Sphericity Assumed	34.172	1	34.172	3.556	.069
	Greenhouse-Geisser	34.172	1.000	34.172	3.556	.069
	Huynh-Feldt	34.172	1.000	34.172	3.556	.069
	Lower-bound	34.172	1.000	34.172	3.556	.069
Error(PRE_POST)	Sphericity Assumed	288.313	30	9.610		
	Greenhouse-Geisser	288.313	30.000	9.610		
	Huynh-Feldt	288.313	30.000	9.610		
	Lower-bound	288.313	30.000	9.610		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

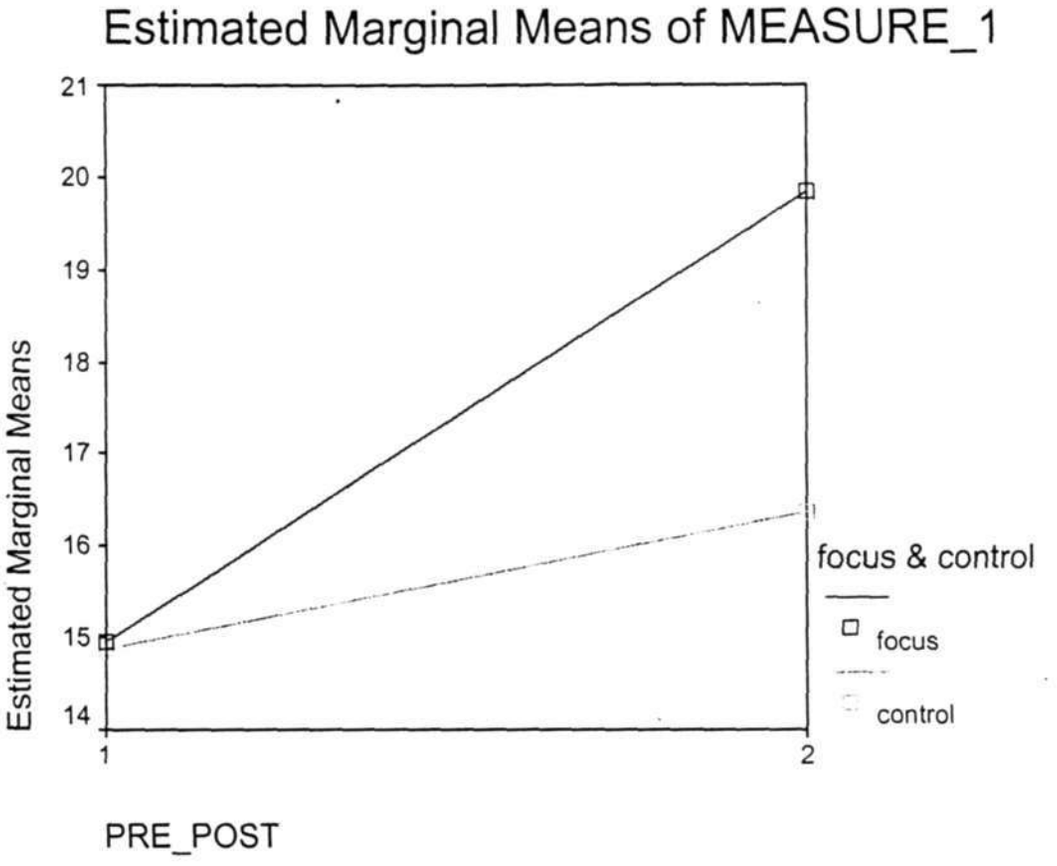
Source	PRE_POST	Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Linear	121.922	1	121.922	12.686	.001
PRE_POST * GROUP	Linear	34.172	1	34.172	3.556	.069
Error(PRE_POST)	Linear	288.313	30	9.610		

Tests of Between-Subjects Effects

Measure: MEASURE_1
Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	13084.505	1	13084.505	664.493	.000
GROUP	37.630	1	37.630	1.911	.177
Error	590.729	30	19.691		

Profile Plots



General Linear Model

Within-Subjects Factors

Measure: MEASURE_1

PRE_POST	Dependent Variable
1	CRPROBSL
2	P_PROB_S

Between-Subjects Factors

		Value Label	N
focus & control	1	focus	24
	2	control	8

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.
PRE_POST	Pillai's Trace	.142	4.964(a)	1.000	30.000	.034
	Wilks' Lambda	.858	4.964(a)	1.000	30.000	.034
	Hotelling's Trace	.165	4.964(a)	1.000	30.000	.034
	Roy's Largest Root	.165	4.964(a)	1.000	30.000	.034
PRE_POST * GROUP	Pillai's Trace	.092	3.044(a)	1.000	30.000	.091
	Wilks' Lambda	.908	3.044(a)	1.000	30.000	.091
	Hotelling's Trace	.101	3.044(a)	1.000	30.000	.091
	Roy's Largest Root	.101	3.044(a)	1.000	30.000	.091

a Exact statistic
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Mauchly's Test of Sphericity(b)

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon(a)		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
PRE_POST	1.000	.000	0	.	1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.
a May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.
b Design: Intercept+GROUP Within Subjects Design: PRE_POST

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Sphericity Assumed	35.880	1	35.880	4.964	.034
	Greenhouse-Geisser	35.880	1.000	35.880	4.964	.034
	Huynh-Feldt	35.880	1.000	35.880	4.964	.034
	Lower-bound	35.880	1.000	35.880	4.964	.034
PRE_POST * GROUP	Sphericity Assumed	22.005	1	22.005	3.044	.091
	Greenhouse-Geisser	22.005	1.000	22.005	3.044	.091
	Huynh-Feldt	22.005	1.000	22.005	3.044	.091
	Lower-bound	22.005	1.000	22.005	3.044	.091
Error(PRE_POST)	Sphericity Assumed	216.854	30	7.228		
	Greenhouse-Geisser	216.854	30.000	7.228		
	Huynh-Feldt	216.854	30.000	7.228		
	Lower-bound	216.854	30.000	7.228		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

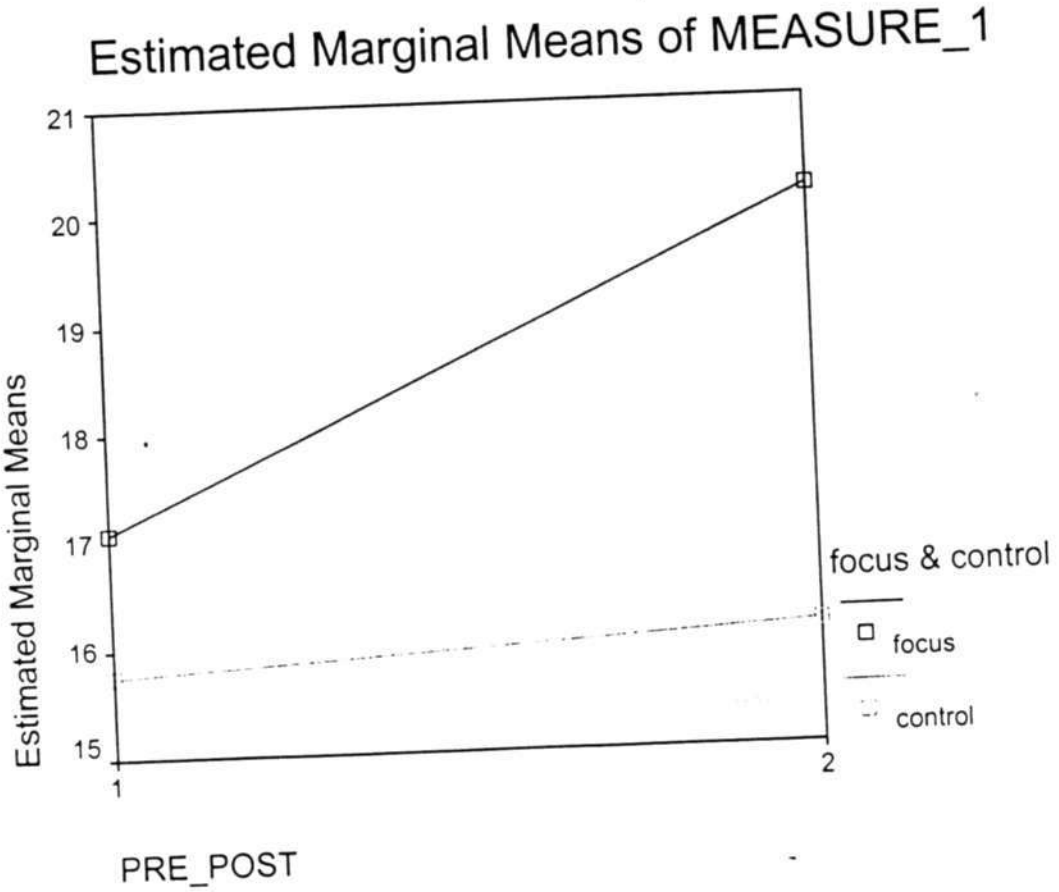
Source	PRE_POST	Type III Sum of Squares	df	Mean Square	F	Sig.
PRE_POST	Linear	35.880	1	35.880	4.964	.034
PRE_POST * GROUP	Linear	22.005	1	22.005	3.044	.091
Error(PRE_POST)	Linear	216.854	30	7.228		

Tests of Between-Subjects Effects

Measure: MEASURE_1
Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	14334.797	1	14334.797	635.513	.000
GROUP	86.672	1	86.672	3.842	.059
Error	676.687	30	22.556		

Profile Plots



APPENDIX J - ADDITIONAL MATERIAL HANDED TO GROUP

TAKING CARE OF YOURSELF

WHAT IS TRAUMA ?

A traumatic experience is an event that is outside of the range of usual human experience and it is markedly distressing to almost everyone. A person must firstly experience or witness an event that involves actual or threatened death or serious injury or learning about unexpected or violent death or serious harm or threat of death or injury experienced by a family member or a close friend and secondly, the person's response to the event must involve intense fear, helplessness or horror.

A traumatic experience is different from a crisis as it goes beyond what is usually expected to occur in one's life. For example, the death of an elderly loved one after an illness is not considered traumatic because the loss, although it can be devastating and deeply sad, is an expected life event. The loss of a child due to a motor vehicle accident is generally considered to be a traumatic experience. Another difference is that a crisis often offers opportunities for growth, whilst a person may learn from a traumatic experience and become stronger, it always involves great terror and danger, and these are damaging to a person's mental health and to the social fabric of society.

Some people who have been through a traumatic event develop full blown PTSD whereas others will develop a few symptoms of post-traumatic stress. Post traumatic stress symptoms are reactions to an overwhelming external event, and arise even in people who have no history of psychological problems. They can and do occur in even the strongest and most capable people. The symptoms are a "normal" reaction to an abnormal event. In general, the development of post-traumatic stress symptoms and the severity of these is linked to the intensity of the event rather than the pre-existing personality pattern.

One can recognise post-traumatic stress symptoms as:-

- Re-experiencing the event through vivid memories or flash backs.
- Feeling "emotionally numb".
- Feeling overwhelmed by what would normally be considered everyday situations and diminished interest in performing normal tasks or pursuing usual interests.
- Crying uncontrollably.
- Isolating oneself from family and friends and avoiding social situations.
- Relying increasingly on alcohol or drugs to get through the day.
- Feeling extremely moody, irritable, angry, suspicious or frightened.
- Sleep disturbances : having difficulty falling or staying asleep, sleeping too much, experiencing nightmares, fears of sleeping alone and sleep walking. Sleep disturbances may continue for several days or even weeks, and there may or may not be nightmares of the traumatic incident.
- Feeling guilty about surviving the event or
- Feeling fears and a sense of doom about the future.
- Separation anxiety or clinging behaviour, such as reluctance to return to School / Work / everyday life activities and a fear of being alone.
- Phobias about distressing stimuli that remind the victim of the traumatic event.
- Conduct disturbances, including problems that occur at home or at work which serve as responses to anxiety or frustration.
- Doubts about the self, including comments about body confusion, self-worth and desire of withdrawal.

When dealing with a traumatized person, it is helpful to conceptualise the process of trauma as having three main phases. These phases do not follow any strict duration although they do tend to occur in sequence - they are characterized more by the behaviour of the person in response to the traumatic event. The three phases are referred to as :-

The Impact Phase, The Recoil Phase and the Reintegration Phase.

The Impact Phase:- is a phase which occurs immediately after the impact of the trauma and can last from a few seconds to several days after the event. In this phase the person appears emotionally numb, disoriented, confused, irrational and disorganised. The person is in a state of shock, and may not be entirely aware of the reality of what has happened to them.
Some people show a lot of emotion, and may scream or cry. Others are completely calm, as though nothing has happened. The person may seek reassurance and direction.
The person is temporarily helpless in this phase and their low level of functioning can be compared to that of a very young child. During this phase they may feel extremely confused and not able to hear, speak, think or see clearly. How to help : At this point, intervention needs to be "parental" - calming, reassuring and sometimes even organising. The person needs to be in a safe environment, with structure and support. As a result of the temporary helplessness, the person may need practical assistance in contacting relatives, reporting to the Police, with tasks such as cleaning up in their home or preparing meals. They need to be encouraged to ask for the help that they need, preferably from their family, friends and normal social support system. The person should also be encouraged to seek professional assistance for trauma support like psychological debriefing.

In the Recoil Phase :- the person begins to be able to live with the trauma as a memory. Ideally, they return to their previous level of functioning and experience themselves as intact again. Although trauma does change the individual, and does leave emotional scars, the person can learn to live with the experience in a functional way. Some people may be able to draw strength and insight from having been able to cope with the trauma. The aim for this stage is not for someone to forget about what has happened, but for them to be able to deal with the reality of what they have been through without feeling overwhelmed.

How to help:- in this phase, the person's trust in others start to be rebuilt and the person has an

increased ability to relate emotionally to people around him or her. This should be encouraged and supported.

These are some coping aids for traumatic stress:-

1. Get support from meaningful others - don't be afraid or embarrassed to ask for help.
2. Structure your life as much as possible - children especially need their routines to return to normal as soon as possible.
3. Do not make any life decisions.
4. Try and have somebody that you trust near you to help you in any way.
5. Increase your physical exercise - take long walks, do gardening, tidy out cupboards, etc.
6. Talk about your feelings to family, friends, a Priest or even write them down.
7. Your cultural or religious traditions may offer some helpful / comforting guidelines.
8. Limit the use of alcohol or any type of drugs.
9. Remember, other people may also be under stress, especially remember the young children around you.
10. Help other people by sharing your feelings and ask how they are feeling.
11. Give yourself permission to feel bad, to cry, to grieve. A good cry can be very healing, even if it is not altogether culturally or socially acceptable.
12. Eat regularly and nutritionally. Supplement your diet with Vitamins C, B2, B6, Calcium and Magnesium.
13. Try and sleep well. Drink a warm drink before going to sleep (not tea or coffee), avoid too much tea or coffee during the day, do not smoke for two hours before bed time.
14. Writing down your thoughts, keeping a diary, drawing your experiences may be helpful.
15. Do nice things for yourself.
16. Remember that you are reacting normally to an abnormal situation.
17. Start positively
18. Be direct

And finally, I cannot do justice to this paper unless I talk about Continuous Traumatic Stress. The term continuous traumatic stress has been developed to describe individuals who have experienced a number of traumatic stressors and who live in situations of ongoing traumatic stress and danger, eg : living in or feeling from a war zone, living in a very violent neighbourhood, constantly being exposed to trauma through one's work for eg :
Police officials, Firemen, Nurses in casualty wards and ICU.

Individuals who are living or working in situations of continuous traumatic stress show symptoms of post traumatic stress, but the symptoms tend to be more sever. The individual may have more rigid defence mechanisms and there will be a stronger use of denial and numbing. It is essential for individuals in these situations to have strong family, social and work support systems to help deal with this regular bombardment. It is also important for these individuals to be coached in developing positive coping mechanisms, building self-esteem and reinforcing their survivor status.

MANAGING ANGER

To most of us, the word "anger" conjures up fearful and unpleasant images. In our minds this is an emotion we generally associate with a sense of abuse, hurt, violence and destruction.
But this dreadful reputation is very unfair to this natural, basic emotion. After all, it is actually designed to be a positive and constructive aid to survival. It's function is to provide us with vital boosts of both physical and emotional events, just when we are most in need of either protection or healing. Unless we are very extraordinary human beings, or we live extraordinary sheltered lives, all of us will experience this feeling in some degree or other at very regular intervals throughout our lives. The symptoms of anger are not just found in our emotions, but also in our bodies, minds and behaviour.

One of the reasons why anger is so feared by many people is that it appears to have such immense physical power. Sometimes this power is so great that it can overrule both our hearts and our heads.

HOW TO MANAGE ANGER

STEP 1

Challenge and change our attitudes - How about looking at anger more positively.
Gael Lindenfield says that **"Anger can be a positive force, provided that it is measured sensitively and assertively. Don't be afraid of your anger. Use it to do something positive for yourself".**

STEP 2

Take control of your fears. We often feel the emotions of anger and fear together.
Know your fears and try to understand and make sense of your fears. It will help you to control anxiety attacks and also help you to control feelings of anger.

STEP 3

Have the beast within yourself. Having answers of your own faults is essential to aggressiveness self- helps us to stop or at least take control of the common Psychological defence of projection. Often when we are angry at or irritated by someone else, it is because they may be displaying a negative quality which we do not like in ourselves.

STEP 4

Deal with the backlog of unresolved anger. Allow yourself to gain an understanding on how feelings from the past can influence your current emotional life. Take some time to reflect on your experience of hurt, situation and loss. Make a list of past events and relationships which still hold some emotional pain for you. Note in brackets why you didn't fully deal with your feelings, at the time. Devise an action plan to deal with your feelings or maybe confront the people concerned directly.

STEP 5

Learn to except feelings appropriately and skilfully.

- ☐ Specify the degree of anger
- ☐ Don't accuse others of making you angry
- ☐ Share your feelings of threat and fear
- ☐ Acknowledge your responsibility
- ☐ Avoid self put downs or invitations to criticism or retaliatory anger.
- ☐ Don't bring up too many past grievances.
- ☐ Don't play "amateur psychologist"
- ☐ Don't "Label"
- ☐ Don't preach or moralize
- ☐ Avoid bringing in a third party
- ☐ Criticize the behaviour and not the whole person.
- ☐ Be specific and realistic in your requests.
- ☐ Don't over-threaten with punishments
- ☐ Avoid humour
- ☐ Try to offer a reward
- ☐ Use assertive language

STEP 6

Find construction channels for your anger. Sometimes when our frustration are long term, there is no way that a contribution, or even a massive outburst will our anger or resolve the problem. Your anger has a reason and you have to make a plan to deal with it.

GOAL	:	Set a realistic goal of what you would like to achieve after some action.
RIGHTS	:	Acknowledge, your rights.
PRICE	:	Ascertain what price you will have to pay for making some change.

SUPPORT : Ensure that you have some support.

AGENDA : Plan your Agenda - "how" am I going to solve the problem.

EVALUATE YOUR PROGRESS : Ensure that you are making some kind of headway.

REWARD YOURSELF APPROPRIATELY : Make sure that each spell Success, and even each attempt to tackle the problem, is rewarded in some way.

REMEMBER, if you have successfully manage to deal with your anger, why not help others to learn how to deal with it.

CONFLICT AND COMMUNICATION

Conflict arises when there is a difference in opinion in situations. Conflict is a healthy aspect of communication, but the way the conflict is dealt with makes the difference.

Good communicators are able to express their thoughts and feelings openly and directly, while allowing and encouraging the other person to do the same. In other words, they tell the other person what they are thinking and feeling, and try to understand what the other person is thinking and feeling too. **Importantly**, don't be afraid to apologise when you are in the wrong.

A smile apology brakes many barriers.

As a Policeman, it is important that you have an emotional cushion to help buffer you against your daily stressors. One of these buffers could be your family. Good communication will help you have healthy relationships. Ensure that you and your spouse have couple time as well as, the entire family have family time. If you go home feeling stressed out, take some time out for yourself before being with your family. Your spouse can be a huge support system, just open your lines of communication. If you make your spouse understand your work, the risk of them

having misconceptions about your work is reduced and you could facilitate a better home support system.

Your colleagues can also be a huge support system for your. Remember, they understand your work because they live it with you. Spend time talking about the incidents that are traumatic with your colleagues, as the more you talk about it the easier it becomes to deal with it and the more sense and understanding you will have of the incident. When traumatic incidents are difficult to deal with and your support system stops being sufficient get help. Go for Trauma Debriefing, it provides an alternative, safe mechanise to deal with traumatic incidence.

Remember - You don't have to go at life alone. You have to be tough with your line of work, but you also have to offload. Do exercise, get rest, and find ways of including fun, enjoyable activities as part of your life. Breathing deeply while thinking of calming, relaxing places in your mind will help you relax and can facilitate sleep when it is difficult to fall asleep. Don't ignore your body, it is your warning button, if you are not feeling physically alright, start setting up positive structures in your life to help you deal with all the negative aspects of your life.

Work is not your life. It is part of your life, don't ignore your family and your responsibilities.