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NON-PROFESSIONAL TRAUMA DEBRIEFERS IN THE WORKPLACE: INDIVIDUAL AND ORGANISATIONAL ANTECEDENTS AND CONSEQUENCES OF THEIR EXPERIENCES

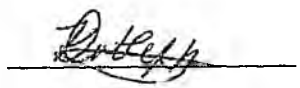
Karen Ortlepp

A thesis submitted to the Faculty of Arts, University of the Witwatersrand, Johannesburg in fulfilment of the requirements for the degree of Doctor of Philosophy.

Johannesburg, 1998

DECLARATION

I hereby declare that this thesis is my own work and has not been submitted to any other University.



Karen Ortlepp

12th day of November, 1992

ABSTRACT

Levels of criminal violence in South Africa have increased exponentially in the last few years. Indeed, South Africans can be seen as living within conditions of continuous traumatic stress. The workplace is often the primary source of violence as is evident in the occurrence of armed robberies in financial institutions. One response to this has been the introduction of trauma management interventions utilising trained, non-professional trauma debriefers. The present study is set within the broad theoretical area of trauma. More specifically, within the theoretical framework pertaining to secondary traumatic stress and a congruence model of organisational behaviour. This study aims to explore the individual and organisational factors affecting, and being affected by, fulfilling the role of a trauma debriefer in the banking environment.

In the present study, a triangulated research design was adopted in which both quantitative (N = 130) and qualitative (N = 30) data was collected from non-professional trauma debriefers in three banking institutions. A three phase research process was followed. The first phase involved the development of the Workplace Trauma Debriefers Scale to measure the organisational factors that may impact on the experiences of debriefers in organisational settings. This scale was found to consist of three factors, namely, Programme Co-ordination, Self-efficacy, and Stakeholder Commitment.

Phase 2 formed the quantitative stage in the current research and aimed to determine first, whether workplace trauma debriefers experience secondary traumatic stress and second, the impact of personal and organisational variables on their potential experience of this secondary traumatic stress. Personal variables included biographical data, previous exposure to work and non-work related trauma, and an indicator of personality disposition, namely, Sense of Coherence. Organisational variables focussed on included trauma programme intervention strategies, role conflict, role satisfaction, and issues related to key stakeholders' recognition and commitment. The role of social support in moderating the relationship between trauma debriefers' experiences and secondary traumatic stress was investigated. In addition, Phase 2 of the present study examined the extent to which the experience of being a trauma debriefer in the workplace impacted on the significant work attitudes of job satisfaction and organisational commitment.

In order to further explore the findings that emerged from the quantitative study, focussed interviews were conducted with 30 debriefers (10 from each of the three organisations) 6 weeks following their last involvement in a debriefing incident (Phase 3). Thematic content analysis was used to analyse the data from these interviews. The results from both the quantitative and qualitative studies are integrated and discussed within a congruence model of organisational behaviour.

Results indicate that the non-professional workplace trauma debriefers in the present study, in general, did not experience symptoms of secondary traumatic stress, in the long term. However, changes to debriefers' cognitive schemata regarding their world views were still found to be present 6 weeks after their last debriefing incident. Debriefers in both the quantitative and qualitative phases of this study were found to experience considerable role satisfaction reflecting the inherent rewards associated with the task of helping others in need. Contrary to the indications in the literature, the nature of the incident precipitating the need for debriefing, was not found to impact on debriefers' scores on the secondary traumatic stress indicators. With reference to potential role conflict between debriefers' full-time employment responsibilities and their debriefing responsibilities, involvement in tasks other than that of trauma debriefing was seen to play a significant role in preventing the onset of secondary traumatic stress. Self-efficacy was found to be the most significant contributing variable to debriefers' role satisfaction and also contributed significantly to two of the three indicators of secondary traumatic stress.

With reference to the personal characteristics of the debriefers, neither demographic characteristics nor previous exposure to work-related traumatic material were found to have a statistically significant impact on the indicators of secondary traumatic stress. Inconsistent findings emerged when focussing on the effects of prior exposure to non-work related trauma. Sense of Coherence was found to have a significant independent effect on the reaction of debriefers to their debriefing experiences.

Similarly, social support emerged as a main effect variable when considering the relationship between subjects' debriefing experiences and the secondary traumatic stress indicators. However, social support emerged as a consistent moderator of the relationship between the debriefers' experiences and their reported job satisfaction and organisational commitment. Recognition from key organisational stakeholders, and their perceived commitment to the

trauma programme, did not have a strong influence on debriefers' indicators of secondary traumatic stress although they were found to have a stronger impact on their reports of role satisfaction. A strong link emerged between these stakeholders' perceived commitment to the trauma programme and debriefers' job satisfaction and organisational commitment. The training debriefers received, as well as the perceived effectiveness of the trauma programme co-ordinator's activities in general, emerged as strong contributing variables to the experiences and consequences of trauma debriefers in this study.

Results of the p. ..ent study yield theoretical advancements in the field of secondary traumatic stress and also have considerable practical implications related to trauma interventions in organisational settings.

DEDICATION

In loving memory of my father, the person who has shown me

the true meaning of unconditional love.

(21 August 1933 - 21 August 1996)

Not a day goes by without me missing you, Pop.

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INTRODUCTION AND OVERVIEW

In the eyes of many people, South Africa and violence are synonymous terms. Indeed, a Business Against Crime (BAC) report claims that the unprecedented high levels of violence manifested in crime and corruption, are presenting significant threats to the basic fabric of South African society (BAC, 1996a). Organisations are microcosms of the broader environments in which they function. As such, organisations mirror the dynamic conditions in the macro-environment and, within the South African context in particular, violence in the broader environment spills over into the workplace. In addition, the workplace is often the primary source of violence such as is evident in the number of armed robberies in financial institutions. Clearly, violence can potentially have a direct impact on the quality of life of every individual in South African society.

In the past decade, the study of trauma has received a great deal of interest and attention. Trimble (1981) notes that the origin of the study of human reactions to traumatic events can be traced to the earliest medical writings in Kanyus Pyprus, published in 1900 B.C. in Egypt. However, Figley and Kleber (1995) state that the increased recent attention to this topic is due to the acute growing awareness of the long-term consequences of traumatic experiences. Indeed, the fourth edition of the Diagnostic and Statistical Manual (DSM) now identifies Post Traumatic Stress Disorder (PTSD) as a psychiatric disorder that can be accurately diagnosed and treated (APA, 1994). This has, in fact, culminated in the recognition of psychotraumatology as a distinct field devoted exclusively to the study and treatment of traumatised people (Figley, 1988). However, one area that has only recently begun to receive the attention of researchers in the field of psychotraumatology, is the concept of secondary traumatic stress particularly as it relates to care givers working with traumatised individuals (Figley, 1995a; Stamm, 1997; Straker, 1993; Straker & Moosa, 1994).

The escalating incidence of violent organised crime being directly experienced in organisational settings in South Africa, has led to the introduction of a number of organisational initiatives at the micro and macro environmental levels. Financial institutions in South Africa have been one specific organisational context in which the incidence of violent crime, in the form of bank robberies, has escalated dramatically. One response to this has been the introduction of trauma management interventions utilising trained non-professional trauma debriefers. These debriefers aim to assist fellow colleagues with coming to terms with the experience of being involved in a violent work-based incident.

The dearth of research studies in the area of secondary traumatic stress together with the unique nature of non-professional trauma debriefers in organisational settings, has lead to the primary focus of this study being the exploration of the experience of this group of trauma debriefers in financial institutions. More specifically, this study aims to explore the individual and organisational factors affecting, and being affected by, fulfilling the role of a trauma debriefer in the banking environment.

The theoretical and conceptual issues underpinning the rationale for the present study are outlined in Part 1. Focussing on the specific outline of this dissertation, Chapter 1 highlights issues related to the current violence being experienced within the South African context and South African organisational settings. Chapter 2, first focuses on the literature pertaining to trauma and PTSD in general, and then concentrates on issues specifically relevant to trauma in the workplace. In Chapter 3, the concept of secondary traumatic stress is discussed (including issues related to non-professional volunteer counsellors). The potential moderating role of personality and social support is outlined in Chapter 4.

Part 2 of this dissertation concentrates on the present study. As a means of facilitating the understanding of the conceptual underpinnings on which the rationale for the present study

is based, Chapter 5 outlines the aims of this study within the parameters of a congruence model of exploring organisational behaviour (of which trauma debriefing is one example). This then leads to an overview of the three-phase approach adopted in the present study. In Chapter 6 , the methodology adopted for the three phases of the present study is outlined. Chapter 7 covers the results of Phase 1, namely, the development of the Workplace Trauma Debriefers Scale. The results obtained in Phase 2 of the present study are outlined in Chapter 8. This second phase is concerned with the quantitative exploration of a number of specific research questions relevant to the investigation of the individual and organisational factors affecting, and being affected by, the adoption of trauma debriefing responsibilities in the organisational setting. Phase 3 of the present study is concerned with the qualitative exploration of the issues related to being a workplace trauma debriefer and the results obtained in this phase are discussed in Chapter 9. Chapter 10 deals with the integration of the results of the quantitative and qualitative phases and discusses these results within the context of the literature reviewed in Part 1. Finally, Chapter 11, the concluding chapter, identifies the limitations inherent in the present study as well as this study's theoretical and practical implications.

PART ONE : THEORETICAL AND CONCEPTUAL ISSUES

CHAPTER ONE

Violence in the Workplace : The South African Context

The culture of violence in South Africa

South Africa has been heralded as the 'rainbow nation' and held up to all as an example to be admired due to its transition from a racially divided apartheid government to democracy, by means of peaceful negotiation as opposed to revolution (Louw, 1996). Paradoxically, the experience of many South Africans over the last few years has been, and continues to be, characterised by crime and violence (Louw, Shaw, Cameren, & Robertshaw, 1998; Schlemmer, 1996). Indeed, Shaw (1998) reports that criminal violence has grown dramatically under since the transition to democracy began in South Africa in 1990. Survey data reveals that the fear of crime is increasing and that feelings of safety and security are diminishing (BAC, 1996a; Shaw, 1997). Louw (1996) emphasises that crime is now considered by people of all race groups to be the most pressing problem facing the country and that for many people, the fear of losing one's life now overshadows all other fears associated with crime. Similarly, Shaw (1997) observes that the problem has assumed crisis dimensions as the country is swamped by a 'crime wave'

Criminal violence has been identified as the most pervasive form of violence in South Africa (Louw, 1996; Louw et al., 1998). The Nedcor survey on crime is viewed as the largest and most comprehensive survey yet completed on crime in South Africa (Johnson, 1996). This survey aimed to understand and find solutions to South Africa's crime crisis by analysing the results of a nationwide survey of approximately 2600 households and 2000 businesses. The Nedcor Project indicates that South Africa's level of violent crime is five times higher than the average rate on the international crime index (Schlemmer, 1996). South Africa has a rate

of forty-five murders per 100 000 of the general population, which is nearly ten times that of the United States of America, usually considered the most violent of the first-world countries (Lee, 1996). The results of the Nedcor Project reveal that murder in South Africa has increased more steeply than in any other country, bar the Bahamas, and that children and teenagers are seven times more likely to be victims of rape (Lee, 1996; Schlemmer, 1996). More recently, it has been confirmed by the official statistics of the South African Police Services (SAPS) that the incidence of crime in South Africa is high compared to most other countries listed in the Interpol reports. Even prior to these observations, monitors of violence in South Africa have concluded that it is accurate to talk of a 'culture of violence' resulting from the excessive social, political, criminal and domestic violence in our society (Simpson & Vogelman, 1992).

Despite the fact that the above sample of available crime statistics is extremely alarming in itself, it is important to emphasise the point made by Simpson (1994) that statistical information of this form is an inadequate yardstick of the problem. He, and other crime commentators, note that this sort of information is notoriously unreliable in South Africa due mainly to the historically fraught relationship between the public and the police, as well as the internal practices and procedures of the police (Louw, 1996; Simpson, 1994). At very best these statistics, therefore, only give a limited indication of the true situation (BAC, 1996b; Louw, 1996; Shaw, 1997; Simpson, 1994).

A further note of caution has been made by Lee (1996), one of the researchers involved with the Nedcor project. He emphasises that crime statistics, a sample of which was previously provided, should be viewed within the context of the following three points:

(a) South Africa is not way out of line internationally in respect of non-violent crime but in respect of violent crime (murder and assault) it is the worse case of all societies that submit statistics.

(b) The rate of murder is declining, but the overall incidence of murder is still very high.

c) The rate of public violence (usually with a political motive) declined dramatically after South Africa's first democratic elections in April 1994, continued to decline in 1995.

The causes of violence and crime in the South African context are complex. Writers in this area emphasise that violence has a developmental history and in order to understand the current wave of violence and crime, one needs to consider South Africa's past and that the origin of the high level of violence is commonly believed to be apartheid (Hoffman & McKendrick, 1990; Shaw, 1997; Simpson, 1994; Vogelman, 1992). Apartheid was characterised by deep rooted and pervasive division of people based on race (Hoffman & McKendrick, 1990). Communities were polarised and South Africa's political culture mirrored apartheid's violence and intolerance. While the state legitimised violence to maintain its power base, the liberation movement legitimised violence as the only means to topple the apartheid regime (Simpson,1994). Thus, violence became the most common way of bringing about change and managing the resistance to the threat of change. This dysfunctional system survived for decades and Hoffman and McKendrick (1990) postulate that this violent form of conflict resolution may have been modelled, and perpetuates the present cycle of violence. As such, physical and psychological violence has become a way of life in South Africa today, despite the peaceful transition to a democracy.

When focussing on criminal violence in the form of organised crime, Shaw (1998) notes that current estimates indicate that organised crime has doubled under the new government in South Africa. Elaborating on this phenomenon, Shaw states that comparative evidence shows that organised crime grows most rapidly in periods of political transition when state resources are concentrated in certain areas only which allows for gaps to emerge in which organised criminal groups may operate. Furthermore, factors such as the weakening of border controls, coupled with the weakening and inappropriateness of policing institutions, have had a clear influence on the dramatic increase in organised crime evident in South Africa (Shaw, 1998). However, Shaw (1997) warns that it is dangerous and inaccurate to state that this increase in organised crime is purely a consequence of South Africa's political transition. There is strong evidence to suggest that the roots of organised crime lie in the apartheid system, which the negotiated transition sought to end (Hoffman & McKendrick, 1990; Louw, 1996; Shaw, 1997; Simpson, 1994) .

Viewed from a slightly different perspective, but still acknowledging the role played by the apartheid era, the team of researchers involved in the Nedcor Project identified the following factors as causes of criminal violence:

(a) Individual factors such as the break-up of the traditional family, rapid urbanisation, and a sense of relative deprivation.

(b) The loss of long standing authority structures (even if not legitimate) in the process of transition from authoritarian to democratic rule without others being effectively in place.

(c) Ongoing political conflict; poor socio-economic conditions of a large proportion of the population.

(d) The inefficiency of the criminal justice system.

(e) The absence of a national policy and strategy against crime.

Although all these factors are presently being addressed in various forums, the current statistics on crime have led the head of the South African Police Services, Meyer Kahn, to state in a daily newspaper that, "Our nation does not have a soul. We do not have a value system, there is very little respect for the rights and properties of others, very little respect for the rule of law." (Barron, 1998, p.17)

Violent crime in the South African workplace

Organisations may be seen as operating as open systems and are thus affected by, and affect, events in the broader environment (Nadler & Tushman, 1981). Stated differently, the relationship between the community and the workplace is reciprocal (Simpson, 1994). As such, increases in violence in society in general, can be seen to be mirrored by similar increases of violence in the workplace (Flannery, 1996).

Crime has both a direct and indirect impact on organisations (Schlemmer, 1996). Direct effects include loss of goods, damage to property, financial loss, and the rising cost of insurance. The indirect effects include the negative impact on the morale of employees, decreased productivity, lost investment opportunities, and the emigration of skilled employees (Schlemmer, 1996). Added to this list should be the emotional and financial costs associated both with traumatic stress responses as well as secondary traumatic stress reactions. In support of this contention, Flannery (1996) emphasises that direct acts of violence in the workplace may result in symptoms such as hypervigilance, sleep disturbance, exaggerated startle response, intrusive recollections, and the avoidance of daily recollections. Moreover, Flannery states that these symptoms may be accompanied by the disruption of a victim's sense of reasonable mastery, caring attachments to others , and a meaningful purpose in life.

Focussing on the financial implications of crime in the workplace within the South

African context, the Nedcor Project gathered information showing that the average cost, loss or damage of each crime is R42 300. Businesses overall were found to experience an average of one crime every two years amounting to a cost of R21 000 per annum. Given this scenario, and the approximately 750 000 formal businesses in South Africa, the national cost of crime to business amounts to a staggering R15,8 billion per annum (Schlemmer, 1996). Without even attempting to calculate the psychological costs incurred by individuals exposed to this incidence of crime, it is small wonder that business in South Africa, in response to these costs as well as a direct request from President Mandela, has combined resources in order to adopt a well targeted anti-crime initiative (BAC, 1996b).

Bank robbery is the specific form of organised violent crime providing the context within which this study has been undertaken. The most recent statistics from the SAPS highlight that a total of 194 cases of bank robbery were reported during the period 1 January 1998 to 30 June 1998 and that a total of 584 bank robberies were reported in the period 1 January 1997 to 31 March 1998 (SAPS, 1998). The financial costs incurred in this context are alarming if considered within the information outlined above. While the financial costs incurred by businesses operating in this violent context have been directly investigated, the personal human costs to the people involved in these incidents, have received far less attention by organisations. However, some organisations in the South African banking sector have acknowledged the psychological costs incurred by their employees exposed to criminal violence in the workplace. Whether these organisations' motives are purely altruistic, or profit-centred, or a combination of both orientations, is a matter of debate. Nevertheless, whatever the motive, research into the consequences of being exposed to traumatic experiences, of which a bank robbery is one example, has led some organisations to accept responsibility and undertake initiatives that focus on the individual, personal costs inherent in

being involved in a traumatic incident. This trend has also been noted in other countries such as the Netherlands (Kleber & Brom, 1992).

In order to fully understand and appreciate the rationale for the introduction of trauma interventions in the workplace and the resulting experiences of individuals involved in the delivery of the helping service as focussed on in this study, it is essential to initially have a thorough understanding of the nature of trauma. As such, the following chapter reviews the literature pertaining to the field of trauma and Post Traumatic Stress Disorder, in general, followed by a discussion of issues related to trauma in the workplace, in particular.

CHAPTER TWO

Trauma

Overview

The focus of the present study is the experience of non-professional trauma debriefers in the workplace. The introduction of interventions incorporating the services of such individuals, is a direct result of the potential deleterious consequences for the people who have been exposed to a traumatic event such as a bank robbery. In order to fully understand the rationale behind interventions such as the one focussed on in this study, one needs to initially explore the nature of trauma. This, in turn, will provide a basis from which to discuss the issues pertinent to the concept of secondary traumatic stress, which is a phenomenon of more direct interest to the present research.

In discussing the nature of trauma, an outline of its history and conceptual development is provided. This includes a discussion of problems related to its definition and assessment and therefore incorporates the concept of Post Traumatic Stress Disorder. Finally, in support of the idea that trauma does not occur in a vacuum (Kleber, Figley & Gersons, 1995), the phenomenon of trauma as it may occur in the workplace is explored.

Trauma and its origins

In the words of Judith Herman, "The study of psychological trauma has a curious history - one of episodic amnesia. Periods of active investigation have alternated with periods of oblivion." (Herman, 1992, p.7). Herman elaborates on this point and emphasises that this intermittent amnesia is due to the fact that the study of trauma has provoked such controversy over the years that at critical periods it has become an anathema. This contention is made more evident as the historical map of the study of psychological trauma is outlined.

In 1656 the word 'traumatic' was initially defined by the English Oxford Dictionary as

"belonging to wounds" or "the cure of wounds" (Young, 1995, p.13). This definition reflects its usage at that time as referring only to physical injuries and it was only in the late nineteenth century that the term came to also reflect the concept of "mental injury" (Young, 1995). Trimble (1985) traced the origins of traumatic stress to the writings of Erichsen in 1866. According to Erichsen, railway collisions, or the abrupt stopping of a train, could result in symptoms of traumatic hysteria. In opposition to leading physicians such as Erichsen and Oppenheim, Page, a British surgeon, in 1883, introduced the concept of 'nervous shock' which was essentially psychological in origin (Trimble, 1981). In this way, Page differentiated between the effects of injuries whose causes were physically determined, and symptoms in which psychological events were of primary importance (Peterson, Prout & Schwarz, 1991). Page, therefore, introduced a change in the manner in which trauma was conceptualised as he emphasised the need to take into account the role of emotional and psychological factors in the onset of symptoms (Young, 1995).

Jean-Martin Charcot was thought to have made the most significant contribution in the early history of trauma (Trimble, 1985). In the 1880's, Charcot introduced the idea of traumatic hysteria which referred to a set of emotional consequences of exposure to a shocking event (Trimble, 1985; Young, 1995). Janet expanded on Charcot's ideas in his observation of the occurrence of psychological dissociation as a consequence of shock (Peterson et al., 1991).

In 1885, Freud and his colleague Breuer identified the process of psychological trauma and discovered that the experience of a traumatic incident leads to symptoms of anxiety, fright and shame which in turn lead to physical manifestations (Trimble, 1985). Of key importance was their observation that this process occurred in people not considered to be genetically or otherwise predispositioned to hysteria (Young, 1995). In his work with women patients from

both Viennese and Parisienne society, Freud found disturbing evidence of rampant childhood sexual abuse (Herman, 1992). This clearly had radical social implications. Freud became disillusioned and abruptly terminated his research into trauma (Herman, 1992). Following this, the study of psychological trauma went into hibernation and only resurfaced again with the onset of the two World Wars.

Coinciding with the two World Wars in 1917 and 1941, as well as the Korean War in 1952, interest in trauma was rekindled with a specific focus on the impact of war on soldiers (Young, 1995). Soldiers who were found to display symptoms of depression, paralysis, phobias, and recurrent battle dreams were initially considered to be weak and lacking in military discipline. In addition, it was generally accepted that the causes of emotional problems were physical in nature and not attributable to exposure to an extreme stressor. However, Kardiner, in 1941, criticised professionals for having neglected the pursuit of an understanding of war neurosis (Herman, 1992). Consequently, in 1952, the DSM-1 publication included a category termed 'gross stress reactions' (Herman, 1992; Young, 1995). However, given the prevailing peacetime in American society, by the time the second publication of the DSM was introduced in 1968, this category was replaced by 'adjustment reactions to adult life' (Kleber & Brom, 1992).

The onset of the Vietnam War led, once again, to a resurgence of interest in the issue of war neurosis as veterans were found to be severely traumatised by their experiences of combat (Young, 1995). It was eventually acknowledged that psychological trauma is a lasting and inevitable legacy of war (Herman, 1992). As a result, in 1980, Post-traumatic Stress Disorder (PTSD) finally became a legitimate diagnosis and was included in the third edition of the Diagnostic and Statistical Manual (DSM) (Peterson et al., 1991). Hence, although the field of trauma clearly has strong historical roots, it was not until 1980 that the symptoms now

associated with PTSD were included under a single diagnostic category in the DSM-111 (Figley,1995a).

Post-traumatic Stress Disorder

The inclusion of PTSD in DSM-111 resulted in a great deal of controversy and stimulated intense debate around issues concerned with definition criteria, as well as theoretical models proposed to explain the nature of PTSD. Green (1994) noted that there have been about 600-700 new articles published on the topic of PTSD in English in the last several years alone. This critical debate stimulated the metamorphosis of the definition of PTSD as formally recognised in the subsequent publications of the DSM.

Focussing firstly on the DSM-111, PTSD can be seen as one of the few psychological disorders that is partially defined by the environment. Accordingly, the essential feature of PTSD is that it should result from traumatic events which have to be "outside the range of normal human experience" and "should be markedly distressing to most individuals" (APA, 1980, p. 238). Given these parameters, stressors such as simple bereavement, chronic illnesses, work losses and marital conflict would not be sufficient to precipitate PTSD as defined by DSM-111 (O'Donahue & Elliot, 1992). However, findings from empirical studies did not support the argument that only a distinct class of stressors is associated with PTSD symptomatology (Breslau, 1990). For instance, Horowitz, Wilner, Kaltheider and Alvarez (1980), found that subjects who were suffering from bereavement were manifesting symptoms of PTSD and therefore, the stipulation that the distinctive feature of PTSD is a traumatic event which is "outside the range of normal experience" (APA, 1980, p. 238), was questioned. These findings and others by researchers in this field, emphasised the importance of the role of subjective meaning which individuals attach to events (Robbins, 1990)

Despite these arguments, even though the definition of PTSD was revised in the DSM-

111-R , it was not modified to include events which are considered to be within the normal range of human experience. The DSM-111-R still defined the stressor objectively rather than adopting Horowitz's subjective criterion (Scrignar, 1988). Thus, PTSD is defined in the DSM-111-R as a constellation of characteristic symptoms that develop when "the person has experienced an event that is outside of the range of usual human experience and that would be markedly distressing to almost anyone" (APA, 1987, p.250). In addition, the DSM-111-R includes a list of examples including, "witnessing destruction or violence; a serious threat or harm to one's children, spouse or other close relatives; the sudden destruction of one's home or community; and seeing another person who has recently been, or is being seriously injured or killed as the result of an accident or physical violence" (APA, 1987, p. 247). As revised in 1987, the diagnostic criteria for PTSD included: (1) exposure to an extreme stressor outside the range of usual human experience; (2) re-experiencing the traumatic event via memories, dreams, flashbacks, or distress at exposure to reminders; (3) persistent avoidance of stimuli associated with the trauma, or numbing of general responsiveness; and (4) symptoms of increased arousal, such as sleep disturbance, irritability, difficulty concentrating, hypervigilance, exaggerated startle response, and physiologic reactivity at exposure to reminders of the event (APA, 1987).

According to some authors, the revised definition did not represent a material advance in attempting to specify the nature of PTSD (Breslau, 1990; Kasl, 1990) and once again a great deal of debate followed. Esprey (1996) encapsulates the trends in this debate and identifies six general areas of criticism to emerge in the trauma literature subsequent to the publication of the DSM-111-R in 1987.

Firstly, authors such as Keane and Wolfe (1990) critique the definition of PTSD for including symptoms which are non-specific to that disorder. As such, it is noted that people

who suffer from PTSD, as defined by the DSM-111-R, also suffer from other disorders such as depression and substance abuse. This overlap between PTSD and other disorder symptomatology highlights the critical limitations in the diagnostic accuracy of the category (Keane & Wolfe, 1990; Kleber & Brom, 1992). Linked to this criticism is the one noted by Breslau (1990) who refers to the DSM-111-R diagnostic criteria as being non-specific to PTSD as the two core symptoms of intrusion and avoidance are shared by other disorders.

The second category of criticisms identified in the trauma literature reviewed by Esprey (1996), is related to the indistinct nature of the definition of a traumatic event. Accordingly, authors such as Figley (1985), Breslau (1990), and Kleber and Brom (1992), argue that the definition of a traumatic event needs to acknowledge each person's subjective evaluation of the event before assessing whether the event qualifies as an ordinary stressor or as a traumatic event. In line with the arguments concerning the subjective nature of the experience of PTSD, Figley (1985) shows that the DSM-111-R description of PTSD does not explain who will experience trauma in contrast to who will not, and also ignores the temporal nature of a PTSD response. However, other authors have criticised definitions that acknowledge the subjective nature of trauma as being tautological (Solomon & Maser, 1990). According to this perspective, an event is a trauma because its consequences are traumatic thereby including both the stressor and the stress response in a definition of the same concept.

Focussing on a further issue, Pynoos & Nader (1993) criticise the PTSD classification in the DSM-111-R for being non-specific to children. They argue that a separate classification be created for children, given the different way in which symptoms are manifested in children. The final two criticisms of the DSM-111-R , as categorised by Esprey (1996), relate to the particular positioning of PTSD in the system of classification. The first issue is concerned with whether PTSD should be defined as: an anxiety disorder or as a dissociative disorder or

under a completely separate category, as has occurred with the inclusion of a category named Acute Stress Disorder (Brett, 1993). The second classification debate is concerned with the assumption that PTSD is a mental disorder rather than a normal response to an abnormal stressor (Van de Kolk & Sapporta, 1993).

Another matter for debate, and one which is most pertinent to South Africa, is the concept of continuous trauma. The DSM-111-R does distinguish between enduring and acute traumata, but does not extend this differentiation to its traumatic stress syndrome symptomatology (Esprey, 1996). Straker (1987) claims that PTSD is a misnomer in South Africa given the context of civil and political violence and upheaval. However, in response to this view, Simpson (1993) argues that there is no research to suggest that continuous exposure predicts any different syndrome with different pathology or features. From a more compromising perspective Herman (1992) states that repetitive trauma may amplify and generalise PTSD symptoms and this should be acknowledged explicitly as a complex form of PTSD which in turn has important implications for treatment.

A number, but not all, of these concerns have been addressed in the revised definition of PTSD in the fourth edition of the DSM which was published in 1994. As such, PTSD is defined as :

> the development of characteristic symptoms following exposure to an extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or threat to one's physical integrity; or witnessing an event that involves death, injury, or threat to the physical integrity of another person; or learning about unexpected or violent death or injury experienced by a family member or other close associate (Criterion A). The person's response to the event must involve intense fear, helplessness, or horror... (Criterion A2). The characteristic

> symptoms resulting from the exposure to extreme trauma include persistent re-experiencing of the traumatic event (Criterion B), persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (Criterion C), and persistent symptoms of increased arousal (Criterion D). The full symptom picture must be present for more than one month (Criterion E), and the disturbance must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning (Criterion F). (DSM-1V, 1994, p. 425).

The debate surrounding the nature and definition of PTSD still continues. Specifically, the previously mentioned concerns around the particular positioning of the disorder in the DSM system of classification, and the issues related to the context of continuous exposure to trauma, are receiving ongoing attention by researchers in this field (Simpson, 1993). Furthermore, a different perspective of the issues surrounding the temporal aspects of PTSD are being examined and has, in fact, led to Acute Stress Disorder being included as a separate diagnosis in the DSM-1V (Koopman, Classen, Cardena & Spiegel, 1995).

The diagnosis, Acute Stress Disorder (ASD), has been created in acknowledgment that an abnormally stressful event may lead many people to experience significant distress and impairment within the weeks immediately following the event (Koopman et al., 1995). The following four broad categories have been identified, of which all must be present, to diagnose ASD : Dissociative symptoms, anxiety symptoms, re-experiencing the traumatic event, and avoiding reminders of the traumatic event (APA, 1994). In addition, the condition must markedly interfere with social or occupational functioning or prevent the individual from pursuing some necessary task. Accordingly, the condition must last for at least two days and occur within four weeks of the trauma. Furthermore, in order to warrant this diagnosis these reactions must not be due to some other specified disorder (APA, 1994). Koopman et al.,

(1995) state that it is likely that many people who experience a distressing event will not meet all the criteria for diagnosis of the disorder, the severity of their symptoms as well as their potential to disrupt functioning for at least a brief period after the stressful event calls for recognition and possible treatment.

The definition of PTSD in the DSM-IV has also highlighted the notion of vicarious traumatisation, which forms the theoretical underpinning of the present study. However, before turning attention to this aspect of trauma research, it is important to have an overview of the theoretical developments identifiable in the trauma literature, as well as an understanding of issues linked to trauma being experienced in the specific workplace context.

Conceptual Developments

Parallel to the developments in the stages of defining PTSD, are developments in the conceptualisation of processes inherent in the experience of PTSD. The inclusion of PTSD as a category of mental disorders in DSM-III, stimulated a great deal of scientific interest into attempts to examine the nature and dynamics of PTSD (Wilson & Raphael, 1993). As a result, a number of theoretical models have been advanced in an attempt to explain PTSD (Peterson et al., 1991). However, to date, there is still a lack of consensus relating to the theoretical understanding with respect to the complex interaction between the nature of stressors, the subjective appraisal of the stressor event, and the psychological response to the event (Solomon & Maser, 1990). Indeed, at one end of the spectrum of theoretical debate, Kasl (1990) goes so far as to reject the notion of trauma as a domain separate from that of general stress research, advocating instead, an integration of research on traumatic stress with that of more common stressful events. However, Friedman (1993) reports robust research studies which show that stress and traumatic stress are biologically different in that PTSD patients exhibit distinctive physiological, neuropharmacological, and neuroendocrinological

alterations. Readers familiar with literature in the domains of general stress and occupational stress specifically, will identify familiar conceptual trends as the following overview of a sample of the core conceptual models related to traumatic stress is provided.

The information processing model proposed by Horowitz (1976, 1979, 1993) is considered to be one of the most influential theoretical perspectives to date (Peterson et al., 1991). Horowitz's model forms the basis for the diagnostic criteria for PTSD as defined in DSM-111. Horowitz introduced the term "stress response syndrome" which he used to refer to all "personal reactions when a sudden, serious life event triggers internal responses with characteristic symptomatology patterns (Horowitz & Kaltreider, 1979, p.163). Clearly, this has links with the work of Hans Selye who defined stress as the "non-specific response of the body to any demand made upon it." (Selye, 1976, p. 74). While Selye then developed his three-stage General Adaption Syndrome, Horowitz focussed specifically on traumatic events and proposed that the stress response syndrome constitutes a pattern of coping with extreme circumstances which, in line with Selye's thinking, occurs in phases.

Based on his research findings on disaster and war grief, Horowitz proposes that individuals cope with serious events by transcending through the following three phases: the first phase is characterised by feelings of bewilderment and disbelief. Thereafter, denial occurs which may either be accompanied or followed by intrusive thoughts and images. Feelings of sadness and memories alternate with feelings of numbness until the event and its implications are eventually integrated into the individual's awareness. The final phase occurs when the significance of the event is more easily accepted and the individual's mood stabilises (Horowitz, 1992).

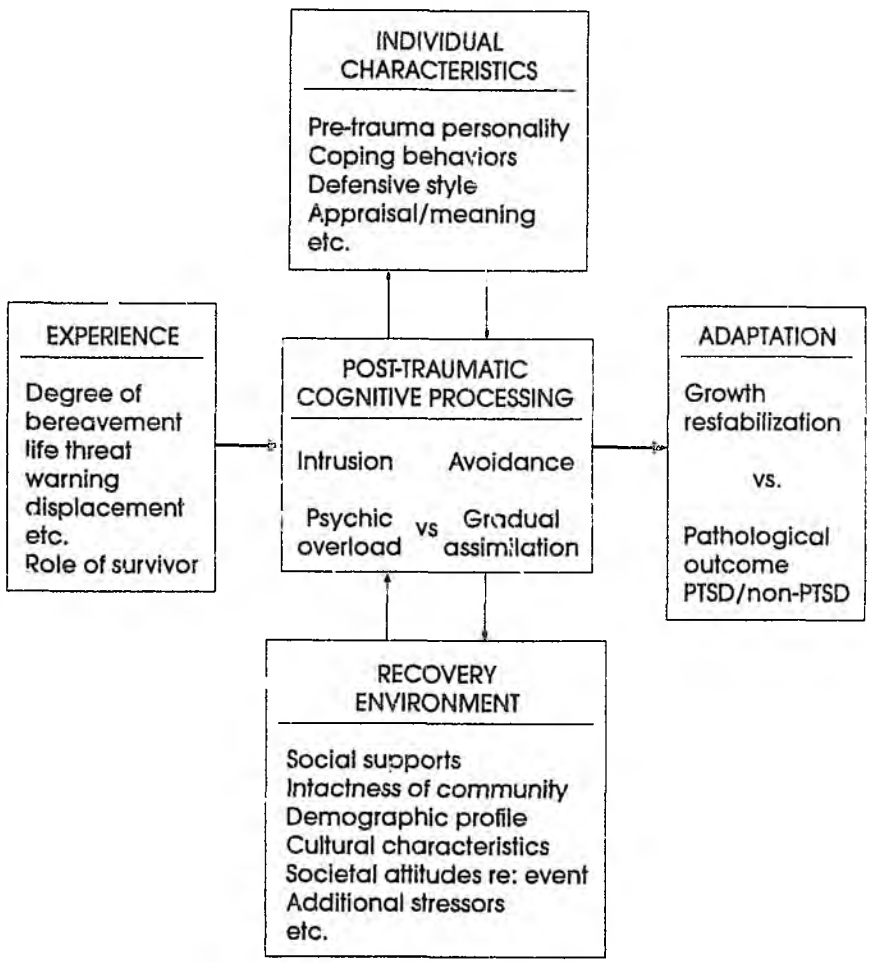
Horowitz's ideas are an extension of psychoanalytic concepts of trauma. Accordingly, the psychic equilibrium of a victim is influenced by a catastrophic event until that event can be

matched to a current or newly generated cognitive model, whereby the new information can be integrated (Horowitz, 1974). Horowitz's theory is extremely significant as it is based on the premise that behaviour is an interaction between the individual and the situation thereby implying that the symptoms are a function of the person and the event itself (Peterson et al., 1991). This model stimulated a great deal of debate and initiated the development of further conceptual models.

Green, Wilson and Lindy (1985) built on the information processing model and proposed a psychosocial model applicable to all types of traumatic experiences (see Figure 1).

The model developed by Green et al., (1985) attempts to explain why certain persons exposed to traumatic incidents develop PTSD while others do not (Peterson et al., 1991).

Figure 1. Psychosocial framework for understanding PTSD (Green et al., 1985)



According to this psychosocial model of traumatic stress, post traumatic adaption is depicted as being dependant on the interaction between the following variables:

(a) The nature and dimensions of trauma such as the severity of the stressor; the duration of the trauma; the degree of bereavement; exposure to death; and the passive or active role taken by the person. The more frequent the occurrence of the above mentioned characteristics, the more probable it is that PTSD will develop (Green et al., 1985).

(b) Individual characteristics are considered to play a critical role in the reactions to traumatic events. The following characteristics have been identified in this model: Pre-existing psychopathology; prior stressful/traumatic experiences; coping defenses; behavioural tendencies; current stage of psychosocial development; appraisal; and demographic factors (Green et al., 1985; Green, 1994).

(c) The recovery environment is acknowledged as one factor that is most often excluded in theoretical formulations of PTSD. Green et al., (1985) state that the following examples of recovery environment characteristics have been found to correlate with post traumatic stress outcomes : Social support; attitudes of society; intactness of the community; and cultural characteristics. In agreement, Harvey (1996) has attempted to counter the existing literature's underemphasis on environmental contributors to individual variations in post traumatic response and recovery by introducing an ecological model. Accordingly, the person-community relationship is seen as a critical factor in determining individual differences in posttraumatic response and recovery and, therefore, has major implications for the concept of resiliency and the relevance

of community intervention methods (Harvey, 1996).

This psychosocial model identifies two types of outcomes resulting from exposure to traumatic stressors, namely, pathological outcomes such as PTSD and other DSM-111 disorders or constructive outcomes characterised by personal growth and restabilisation (Green et al., 1985).

Van der Kolk and Saporta (1993) focus on a model of PTSD which explores the biological response to trauma. PTSD is widely acknowledged as potentially having a negative effect on the four interrelated domains of human behaviour, namely, biological, psychological, social-interpersonal, and cultural (Wilson & Raphael, 1993). The most basic impairment to the organism seems to be to the brain and central nervous system which contain the neurophysiological mechanism that governs memory, affect, thought, and sociability (Wilson & Raphael, 1993). Of key importance to this biological perspective of viewing PTSD, is the concept of hyperarousal and overdriven neurophysiological processes. Accordingly, trauma disrupts the normal steady state of an organism and leads to disequilibrium at both the psychological and physical level. The focus of the psychobiological approach to viewing PTSD is to understand how changes in the central nervous system and the autonomic nervous system occur and how the intricate neural mechanisms control symptom expression and behaviour (Van der Kolk & Greenberg, 1987).

A competing model for the understanding of the onset of PTSD is the behavioural/learning model advocated by Keane, Fairbank, Caddell, Zimering, and Bender (1985). Founded on the principles of classical conditioning and instrumental learning, Keane et al., (1985) propose a two factor learning theory of psychopathology to explain the onset and perpetuation of PTSD. First, it is suggested that a fear response is learned through associative principles as occurs in the process of classical conditioning. Instrumental learning principles

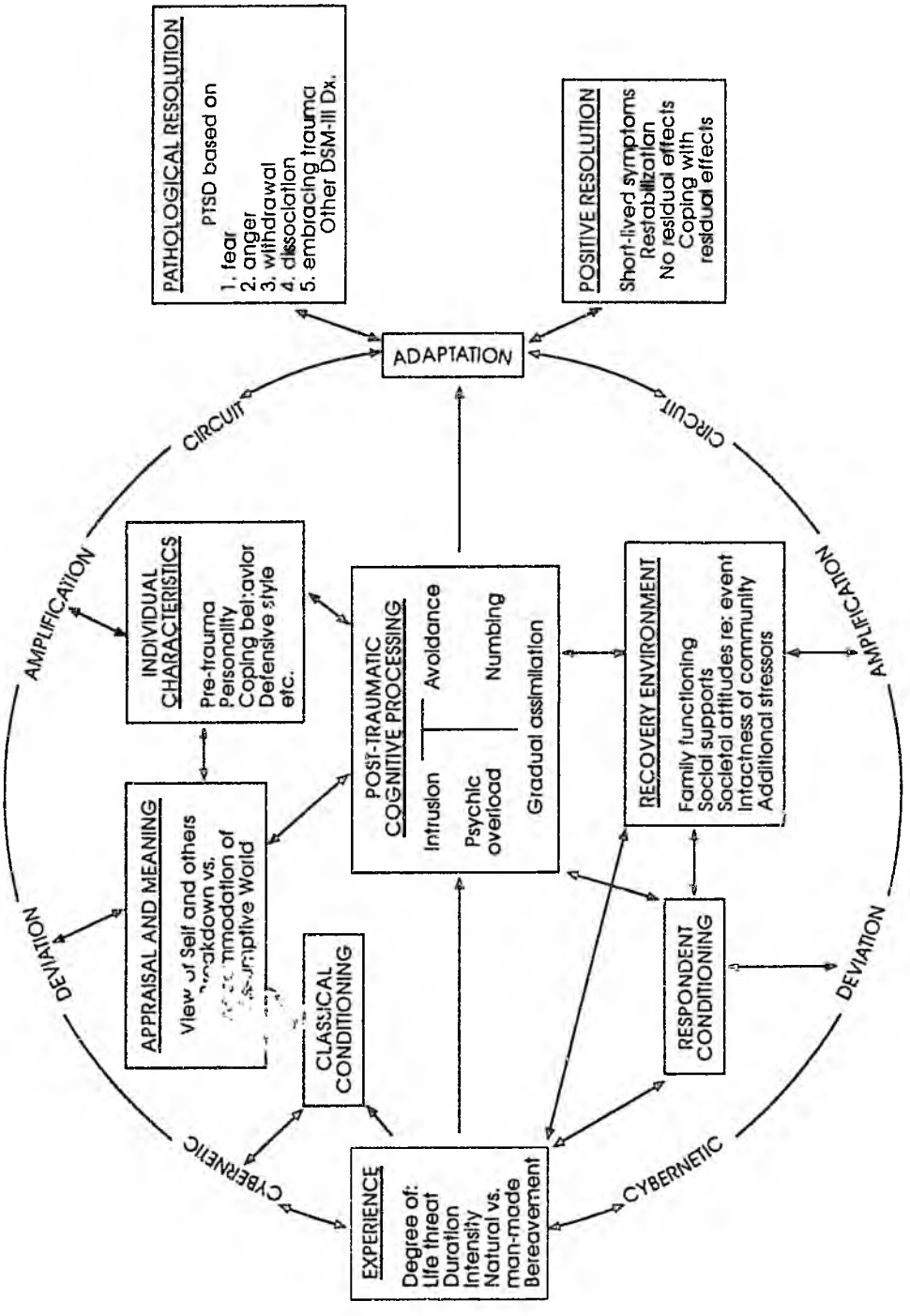
then come in to play and individuals learn to avoid those conditioned cues that evoke anxiety (Keane et al., 1985). Elaborating further on these principles of learning theory, the conditioning of cues, stimulus generalisation, higher order conditioning, and incomplete exposure to traumatic memories are used to explain the complex nature of PTSD symptomatology (Peterson et al., 1991). Peterson et al., (1991) highlight the potential problem with this model in that they state that higher-order constructs such as attribution and motivation are not given enough explicit attention. In line with this observation are the cognitive appraisal models of authors such as Janoff-Bulman (1985, 1992) and Epstein (1990).

Cognitive appraisal models of PTSD focus on the assumptive constructs that each of us make about the world (Peterson et al., 1991). Accordingly, traumatic events are viewed as powerful disrupters of these basic assumptions about the self and the world. PTSD is, therefore, viewed as maladaptive coping responses to the invalidation of these beliefs. More specifically, Janoff-Bulman (1992) proposes that PTSD following victimization, is largely a function of the shattering of the following three basic assumptions victims hold of themselves and their world : The belief in personal invulnerability; the perception of the world as meaningful and comprehensible; and the view of the self in a positive light. This model has been supported empirically (Epstein & Meier, 1989) and has the added advantage of being highly compatible with other views of PTSD (Peterson et al., 1991).

The above overview of some of the key conceptual models proposed for the understanding of the onset of PTSD is not exhaustive. Competing models such as Lifton's psychoformative model (1993) have all contributed significantly to the current understanding of the experience of trauma and the potential onset of PTSD (Wilson & Raphael, 1993). However, the models reviewed here are deemed to have particular relevance to the present study wherein the focus is on the experience of trauma debriefers in the workplace

environment. In an attempt to build on the contributions made by each conceptual model, Peterson et al., (1991, p. 100) propose the following integrated ecosystemic model (see Figure 2).

Figure 2. Ecosystemic model of PTSD (Peterson et al., 1991)



This ecosystemic model builds on the psychosocial model advocated by Green et al., (1985). Accordingly, the path towards PTSD is initiated with a traumatic experience. The first factor to influence the development of PTSD is the way in which the person experiences the event and will include variables such as the length and intensity of the experience and the degree of life threat. The experience of the trauma itself will affect three other variables: Firstly, the post-traumatic cognitive processing of the individual. Secondly, the nature of the event itself, as well as the response of the individual, will impact on the environment and this will, in turn, influence the environment's response. The degree of classical conditioning that occurs is the third variable that is influenced by the characteristic of the trauma itself. As such, the more intense the trauma the more likely a strong conditioned response will occur. The environment will affect the reinforcement contingency schedule and therefore respondent conditioning is also a key variable to be considered.

Appraisal of meaning, incorporating the ideas of Epstein (1989) and Janoff-Bulman (1992), are accorded a separate category in this model. Individual characteristics, such as pre-trauma personality and coping behaviours, are said to influence the appraisal process in that they revolve around how the person places the trauma, their behaviour and the behaviour of others in context with the rest of their life.

In the model it is proposed that different factors in the development of PTSD are surrounded by a cybernetic deviation amplification circuit (CDAC). This circuit can have a positive or negative direction effect and degree of amplification can vary. It is proposed that once the CDAC is established it influences other variables in a unidirectional manner with increasing amounts of amplitude. The course of PTSD can finally result in pathological solutions to trauma , for example, fear, withdrawal and dissociation; or positive resolutions such as minimal disruption, restabilisation and possibly genuine growth. With reference to the

latter consequence, findings emerging from recently published studies attest to the potential perceived benefits to emerge from the experience of traumatic experiences (McMillen, Smith & Fisher, 1997; McMillen, Zuravin & Rideout, 1995).

This ecosystemic model demonstrates the complexities inherent in understanding the nature of PTSD from an integrated perspective. Perhaps the principles of Gestalt psychology would best provide the most accurate concluding remark following a summary of the many conceptual models advocated in the field of traumatic stress. As such, 'the whole is greater than the sum of the parts' and even the most inclusive model is unlikely to explain the nature of PTSD to the full satisfaction of all experts in the field. As in the case of research undertaken in the more general field of occupational stress, researchers in the field of traumatic stress would best be advised to define the conceptual model underpinning their research, making the advantages and disadvantages explicit, and then tailoring their research designs accordingly (Dewe, 1989). This strategy will be adopted in the present study and the particular conceptual basis adopted will be elaborated on in a further discussion.

One of the key aspects in a number of the models described earlier is the interaction between the individual and the environment. This study's unique focus is that of trauma in the workplace environment, the literature pertaining to which will now be reviewed

Trauma in the workplace

Focussing on the United States, Blair (1991) observes that as violence has increased in society, there has been a similar increase of violence in the workplace. When considering the statistics provided in an earlier section of this dissertation, this comment is certainly applicable to the South African context. The workplace is no longer a safe haven for employees (Everstine & Everstine, 1993; Flannery, 1996). Grainger (1995) states that workplace violence covers a wide range of incidents, and reactions of personnel exposed to workplace violence

vary from individual to individual. Focussing on occupational violence statistics specifically, Flannery (1996) reports that, in addition to the more conventional incidents of occupational violence, namely automobile accidents and machine-related deaths, there has been a significant increase in workplace homicides, hostage-takings and assaults. The potential for violent or traumatic incidents to occur is particularly pertinent for anyone handling money as a day-to-day part of their work (Richards, 1994). Despite this increase in the incidence of occupational trauma, there is a dearth of literature and empirical research pertaining specifically to the topic. Experts in the field have identified this specific area as a critical one warranting attention (Figley, 1995a; Figley & Kleber, 1995; Flannery, 1996; Stamm, 1997).

Nature of PTSD in the workplace

Episodes of violence in the workplace may well result in a traumatic stress response and the onset of PTSD in employee victims (Grainger, 1995). Some occupations have predictable and repetitive exposure to traumata, for example, paramedics, firefighters, and police officers. The little trauma research that has been done in the organisational context, has focussed on these professions which are inherently characterised by job-induced trauma (for example, Bryant & Harvey, 1996; Kopel & Friedman, 1997; Marmar, Weiss, Metzler, Ronfeldt & Foreman, 1996; Mitchell & Dyregrov, 1993). However, given the specific focus of the present study, issues related to armed hold-up in occupational settings will be given precedence.

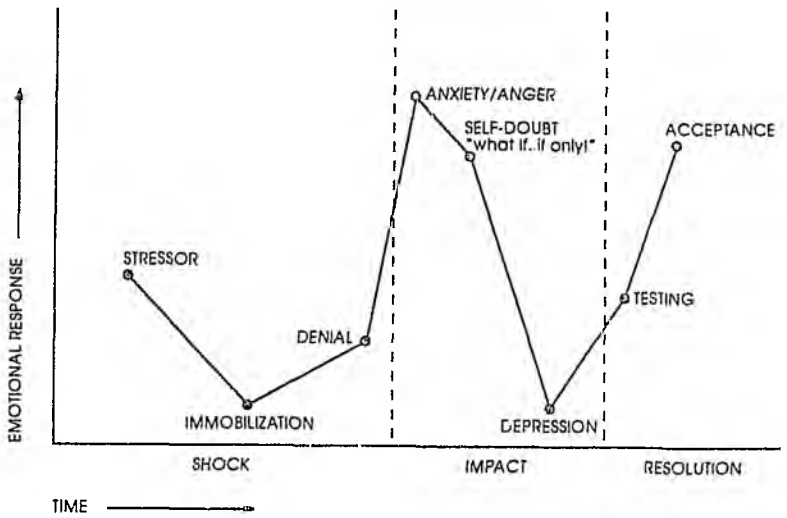
Richards (1994) reports that 25% of bank employees who had experienced robberies, displayed PTSD symptoms in the long-term. Jenkinson (1993) studied over 200 postmen in Northern Ireland who had been exposed to robbery attacks on the job. In this study, subjects served as their own controls and it was found that absence for sickness increased by fourfold following the attacks. Bradit and Normandeau (1987, cited in Flannery, 1996) examined 185

bus drivers and subway cashiers who had been assaulted or robbed during a 1-year period. They found their subjects to be generally apprehensive and more socially withdrawn at the end of one year.

In another study, Von Slagmott and Rabobank (1992, cited in Flannery, 1996), found that in 2 500 incidents of bank holdups or verbally abusive behaviour by customers, between 250 and 500 employee victims presented with symptoms of PTSD. From a more general perspective, Sonderup (1996) observes that symptoms of traumatisation can be manifested in the workplace in the following ways: Absenteeism; poor concentration; careless mistakes; hypervigilance; conflict with colleagues and managers; irritability and aggression; social withdrawal; depression; and physical ailments such as headaches. Similar findings were noted by Kleber and Brom (1992) in their discussion of the impact on employees of armed hold-ups in supermarkets, banks, and department stores. It is essential to note that these symptoms and others associated with post traumatic stress, while 'early having a significant impact on the workplace, are not pathological but should rather be viewed as a normal response to an abnormal event (Manton & Talbot, 1989).

Building on the generic models proposed for the understanding of the onset of PTSD referred to earlier, Williams (1993) has proposed a framework for understanding and responding to workplace trauma (see Figure 3). His framework consists of a three-phase model (Williams, 1993, p.927).

Figure 3. Phases of PTSD (Williams, 1993)



In line with the psychosocial model proposed by Green et al., (1985), Williams emphasises that the nature of the stressor is of critical importance. Hence, an employee may be more susceptible to a specific set of stressors including aspects such as death of a co-worker, multiple deaths, and personal injury. The first phase of the framework for considering the onset of PTSD in the workplace, is the Shock Phase incorporating aspects associated with physical and psychological shock. In this phase the body's 'fight, flight, or freeze' response is alerted. More often, there is an intense focus on the trauma situation similar to 'freeze-framing'. This in turn, may be associated with a perceptual distortion in the form of time expansion or time acceleration. Williams states that the Shock Phase is generally avoided by well-trained employees which may well be the case in the specific situation of emergency personnel where exposure to traumatic incidents is an inherent aspect of the job.

The second phase in this model is the Impact Phase (Williams 1993). It is in this phase that emotional distress is experienced and manifested in symptoms of hyperarousal,

anger, anxiety, fear, and rage. Furthermore, it is during this phase that people have sleep disturbances, memory impairment, trouble concentrating, and flashbacks. Of particular significance in this phase is the aspect of self-doubt and self-questioning, for example, "Did I do the right thing?" (Williams, 1993, p.928). Where there is death involved in the incident, survivor guilt is likely to develop in this phase. This can be characterised by existential guilt ("How come I lived and other people didn't"); and/or content guilt whereby the person feels guilty about behaviours he or she failed to enact during the traumatic situation. The latter would include aspects to do with what Williams terms 'responsibility trauma' which refers to various perceptions of role responsibility and perceived consequences in relation to the outcome. The final step in the Impact Phase is depression with all its characteristic manifestations.

In the Recovery Phase individuals may go through a testing period where they try to lead a normal life. The acceptance step in this phase occurs when employees realise that the trauma is part of their life experience and continue their stream of adaptation. As shown in Figure 3, the acceptance step is designated at a higher state of arousal than when the stressor first occurred and Williams (1993) suggests that if a person is subject to another traumatic event, he or she reenters the recovery process at a higher level of physiological or psychological tension. It is proposed that this will have severe implications for people being exposed to multiple traumas, for example, repeated hold-ups in the workplace. In this state of responsiveness, the individual is at a higher level of susceptibility to trauma. As such, persons who have not successfully dealt with previous trauma often 'stair-step' to more pathological and distressing emotional reactions to the new event. Williams states that skilled intervention during these phases will assist in ensuring positive recovery

While this model is useful in explaining the reactions of people exposed to traumatic

incidents in the workplace, the present author asserts that it is not as comprehensive as the more generic models proposed by, for instance, Green et al., (1985) and Peterson et al., (1991). It is argued that insufficient attention is given to individual characteristics and aspects related to the broader recovery environment. However, the model does serve to highlight the potential manifestations of PTSD in workplace settings as well as underscoring the need for occupational-based interventions.

Post traumatic stress and organisational attitudes

A recent innovation in the area of workplace trauma is the extension of traditional trauma research parameters to the inclusion of examining the impact of PTSD on key work attitudes such as job satisfaction and organisational commitment (Allen & Ortlepp, 1998; Georgiou & Ortlepp, 1998). Numerous studies have focussed on the correlates of job satisfaction within the context of the consequences of occupational stress (Seashore & Taber, 1975). Work stress has been shown to be negatively correlated with job satisfaction (Landy, 1989; Muchinsky, 1993; Terry, Nielsen & Perchard, 1993). In turn, job satisfaction has repeatedly been found to have an impact on employees' absenteeism rates, decrements in performance standards and the propensity to leave the organisation (Mitchell & Dyregrov, 1993). It would be inaccurate to assume that empirical findings related to occupational stress automatically suggest similar relationships between traumatic stress experienced in the workplace given the current level of understanding of issues related to the nature and dynamics of trauma in the workplace. However, these findings do suggest that this is an avenue worth exploring in a further attempt to understand the impact of post traumatic stress in organisational settings.

Tett and Meyer (1993) define job satisfaction as a person's affective attachment to the job viewed either in its entirety (global satisfaction) or with regard to particular aspects (facet

satisfaction). According to the DSM-1V, PTSD sufferers commonly experience emotional anaesthesia and a "markedly diminished interest of participation in previously enjoyed activities" (APA, 1994, p.425). As such, employees displaying post traumatic stress symptoms may well find their work less satisfying. Weiss (1990) suggests that job satisfaction may be explained within the context of classical learning principles. Hence, where the work situation is paired with positive stimuli, satisfaction results. This is of particular interest when considering job-induced trauma as a traumatic experience in the workplace, paired with the negative emotions and experiences that result, could lead to the emergence of low general job satisfaction being experienced.

Focussing on armed hold-ups experienced by 112 employees in a large cash-in-transit company, Allen and Ortlepp (1998) found a moderate inverse relationship between post traumatic stress symptom severity and organisational commitment and job satisfaction. In a separate study conducted on a sample of 100 paramedics, Georgiou and Ortlepp (1998) found a statistically significant inverse relationship between post traumatic stress symptoms and job satisfaction. Before discussing some of the implications of these and other related findings, it is essential to state at the outset that both of these studies were of a cross-sectional correlational design and hence causality cannot be inferred from their findings.

Mowday, Steers and Porter define organisational commitment as "the relative strength of an individual's identification with, and involvement in a particular organisation." (1979, p.226). This implies more than mere passive loyalty to the organisation but rather a belief in the values of the organisation; a willingness to exert effort on behalf of the organisation; and a desire to continue membership of the organisation (Mowday et al., 1979; Steers, 1977). Acknowledging that the experience of a traumatic event can limit a person's affect and remove the ability to enjoy or feel interest in previously enjoyed activities (APA, 1994), one can

clearly see how trauma may relate to a person's commitment to the organisation and job satisfaction as was found in the study by Allen and Ortlepp (1998). This may be further exacerbated in the situation where individuals place themselves at risk of being involved in a violent incident, purely by performing their work tasks in an organisational setting. In addition, the phenomenon of cognitive reappraisal that may occur as a result of experiencing a traumatic incident (Janoff-Bulman, 1992), may well extend to the more specific evaluation of the value one places on one's employment in an organisation in which one is placed in physical danger. This may more strongly be asserted when an employee has experienced the traumatic event in the actual workplace.

The above discussion has focussed on the impact of exposure to workplace violence on the individual and the potential implications for the organisation. The impact of this increase in occupational violence may also be considered at the macro environmental level. For instance, the impact of job-induced violent experiences has recently received the attention of the South African media and trade unions (Gifford, 1998b, Urquhart, 1998). A clear example of this broader societal reaction, is evident in the response to the increased cash-in-transit heists currently being experienced in South Africa (Allen & Ortlepp, 1997). Urquhart (1998) reports that there were more than 400 incidents of armed holdups of cash-in-transit security vans in 1997, which resulted in 60 deaths of security guards and the loss of about R150-million in cash. A national strike by the guarding division of the Professional Transport Union was undertaken only in February this year (1998). The official reasons for the strike related to dissatisfaction with salaries and job conditions (Gifford, 1998a). While one cannot assert categorically that the reason for this strike was the continuous exposure to armed hold-ups, this factor would surely impact on the way employees perceived the costs and benefits pertaining to their jobs.

When one considers the potential impact that exposure to trauma may have on workplace attitudes and behaviours, trauma is clearly, then, a corporate issue with ramifications at both the micro and macro levels. As such, it demands a corporate response (Flannery, 1996; Grainger, 1995; Simpson & Vogelman, 1992; Sonderup, 1996; Wilson, 1991).

Corporate response to workplace trauma

In discussing issues related to the organisation's role in dealing with workplace trauma, Williams (1993) differentiates between two forms of corporate intervention. First, there are strategies concerned with primary intervention. This ideally requires that the stressor itself be eliminated or substantially attenuated whenever possible and falls clearly within the realms of occupational safety procedures and legislation, as well as practical strategies to increase security . However, this is not always feasible in high risk occupations such as fire-fighting and law enforcement although pre-trauma training and crisis management have been found to be beneficial (Flannery, 1996; Williams, 1993). When considering the specific South African context and the prevailing culture of violence (Simpson, 1994) in which South African organisations operate, the likelihood of potential exposure to violence in workplace settings being reduced by the introduction of occupational safety legislation is minimal. Even the most advanced security systems, while essential, will not completely eradicate the incidence of violent crimes in organisational settings. Nevertheless, initiatives such as those embarked on by Business Against Crime (BAC, 1996a, 1996b) and the Nedcor Project (as discussed earlier in this dissertation) are commended as corporate attempts to respond at the primary prevention level.

Secondary prevention strategies are employed to prevent the development of possible permanent emotional injuries by provision of direct services after a traumatic event and prior

to the development of symptoms of emotional distress (Williams, 1993). Early appropriate interventions facilitate the initial phases of the process of coming to terms with the event and probably its entire course and final outcome (Manton & Talbot, 1989). Trauma debriefing is normally based on critical incident stress debriefing (CISD), a technique developed by Mitchell (1983). CISD in the workplace can take the form of individual or group sessions and should take place within the first 72 hours of the traumatic incident as it is during this time that the person is most vulnerable (Mitchell, 1983). The aim in both formats of early intervention, is the normalising and containment of intense feelings, the restoration of some sense of victim mastery, and the provision of support (Manton & Talbot, 1989).

Mitchell and Bray (1990) identify the two critical goals of CISD as being, first, to reduce the psychological impact of the traumatic event and, second, to accelerate the normal recovery of normal people who are suffering through normal but painful reactions to abnormal events. Wollman (1993) contends that a third goal of CISD is to identify and refer those individuals who may need more intensive psychological support. Manton and Talbot (1989) state that early intervention in the form of CISD, may prevent a phobic reaction from developing and facilitates the detection of potential long term effects which may emerge as previous unresolved situations are brought once again into consciousness. Trauma debriefing is therefore not therapy but rather a structured procedure that provides a containing framework for people who have been traumatised (Sonderup, 1996). In the words of Sonderup, trauma debriefing is:

> a process that allows a person to share some thoughts and feelings about the experience in such a way that the likelihood of reactions developing into overwhelming proportions is minimised. Debriefing is not meant to make someone forget, but rather to remember differently. By remembering differently and by using external and internal

resources, people can obtain some sense of mastery over events which were sudden and beyond their control. (1996, p.17).

CISD has its origins in the United States of America, where it was used extensively with emergency service personnel and combatant and paramilitary forces (Mitchell, 1983). In these situations, group interventions were mostly used, as in these areas homogenous groups are trained specifically to function as a team in the crisis for which debriefing is provided (Manton & Talbot, 1989). However, when considering the people involved in a bank robbery, the same homogeneity cannot be assumed. Manton and Talbot (1989) emphasise the fact that in this situation the group of affected employees is usually heterogeneous, not always cohesive, often strictly hierarchical and not specifically trained to deal with the critical incident. As such, the group dynamics can have a potentially destructive impact on the effectiveness of a group CISD and the individual form of CISD is therefore considered more appropriate in this type of work situation (Manton & Talbot, 1989).

Flannery (1996) cites two studies (Lloyd & D'Antonio, 1992; von Slagmott & Rapobank, 1992) suggesting the positive impact of CISD in the workplace. Von Slagmott and Rapobank illustrate the importance of routine CISD and present a systematic approach to CISD of employee victims of bank robberies. As such, their intervention model involves the following steps. First, trained personnel meet with each bank employee victim within 24 hours for CISD. The employee victim is then contacted again after one week for an individual CISD and after 3 months for a group CISD. Individual counselling is utilised as needed. As Flannery states, this model and others similar to it holds promise, but, at present, has limited supporting empirical data.

One study that has focussed on the effectiveness of CISD is that of Grainger (1995). In this study it was found that, "most of the 19 victims who attended critical incident

debriefing found it valuable" (Grainger, 1995, p.197). However, this article does not provide sufficient details regarding the form of critical incident debriefing embarked on. In addition, no data pertaining to control groups or pre-incident data was provided. Manton and Talbot (1989) report that their treatment programme, which incorporates individual CISD following bank hold-ups, has resulted in individuals dealing with the experience more effectively, and that there has been less sick leave and fewer insurance claims for work-based injuries, than prior to the introduction of the programme. However, the precise details relevant to the full interpretation of these results (for instance. time lapse between the event and the data collection; exact number of people involved, longitudinal impact of the critical incident on employees who chose not to attend CISD: long term follow-ups on those who did attend CISD) are not provided by the authors.

Thus, although the results reported in these studies do seem promising, the need for well constructed empirical studies in this area is evident. In direct response to the limitations inherent in the literature currently available, Flannery and Penk (1996) designed a more formal experimental inquiry into the efficacy of CISD as well as other crisis interventions (self-defence training and patient-at-risk conferences) within the context of staff in a psychiatric hospital who are at risk of being assaulted by their patients. This report outlined the research strategy that was adopted, and while the outcomes strongly indicate the effectiveness of the multi-dimensional crisis intervention strategy adopted, more formal results specific to the CISD component were not provided.

In the light of recent claims in the literature that CISD is of dubious benefit and may increase problems (Raphael, Meldrum, & McFarlane, 1995), Dyregrov (1997) has emphasised the need for further empirical studies in this area in which issues pertaining to the timing of the intervention, length of the debrief meeting, and the size and heterogeneity of the group are

clearly outlined.

When one considers strategies such as CISD in the workplace, the phenomenon of secondary traumatic stress as applied to the debriefers emerges. The central focus of the present study is on the unique role of being non-professional trauma debriefer in the specific context of the workplace. As such, the following discussion will deal with the concept of secondary traumatic stress as it relates specifically to trauma caregivers.

CHAPTER THREE

Secondary Traumatic Stress

Background to conceptual issues

As has been shown in an earlier section of this dissertation, The American Psychiatric Association's inclusion of the diagnosis, PTSD, in the DSM-111 in 1980, was considered a milestone in the field of psychotraumatology. Over the years, the specific characteristics of PTSD underwent considerable refinement as evident in the DSM-111-R and the DSM-1V. However, one aspect that has remained constant in the definition of what constitutes a traumatic event as defined in the DSM-111, the DSM-111-R, and the DSM-1V, is the reference to the potential onset of PTSD due to the mere knowledge of another's traumatic experiences (Figley, 1995). The following extract taken from the DSM-1V's description of PTSD clearly highlights that people can be traumatised directly or indirectly:

> The essential feature of posttraumatic stress disorder is the development of characteristic symptoms following exposure to an extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or threat to one's physical integrity; or witnessing an event that involves death, injury, or threat to the physical integrity of another person; or learning about unexpected or violent death or injury experienced by a family member or other close associate (Criterion A). Underlining added for emphasis; (DSM-1V, 1994, p.424).

Elaborating on this point, authors such as Figley (1995a), Figley and Kleber (1995), and Stamm (1995), emphasise that the italicised phrases in the above extract, indicate that people can be traumatised without actually being physically harmed or threatened with harm. Instead, they can be traumatised simply by learning about the traumatic incident. The people who are at risk of being traumatised in this way are the significant others of the primary victim

and include family, friends and neighbours, work colleagues, and helping professionals who assist the primary victim (Figley & Kleber, 1995). Figley (1995b) goes further and states that in his work over the years (e.g., Figley, 1983, 1986) he has observed and noted that the number of victims of traumatic events is grossly underestimated because they exclude the impact on the family and friends of the "victim". However, despite these noted observations and the recurring reference to this phenomenon in the definitions of PTSD, nearly all the attention in the field of psychotraumatology has been focussed on "people in harm's way and little to those who care for and worry about them. " (Figley, 1995a, p.6).

In an attempt to explain why so little attention has been given to the secondary victims of traumatic incidents, Figley (1995a) makes reference to Beaton and Murphy's (1995) proposal that the field of psychotraumatology is in a 'pre-paradigm state'. Accordingly , when considering the development of theory as conceptualised by Kuhn (1970), paradigms follow the evolution of knowledge, which then influences the development of new knowledge. Prevailing paradigms are suddenly viewed as anomalies when new information and paradigm shifts occur (Kuhn, 1970). Figley suggests that this is precisely what has occurred in the prevailing limiting view of PTSD, whereby the potential impact on those attending to the primary victims of a traumatic incident has not been sufficiently explored . "After more than a decade of application of the concept and two revisions of the DSM, however, it is time to consider the least studied and understood aspect of traumatic stress: Secondary Traumatic Stress (STS)" (Figley, 1995b, p.9). Furthermore, given that researchers in this field acknowledge the link between secondary traumatic stress and countertransference (Figley, 1995b; Moosa, 1992), the comments made by Moosa (1992) regarding the dearth of literature and empirical studies in this area may well be of relevance here. This author cites a number of observations made in response to this lack of attention paid to this topic. For instance, Moosa

highlights the work of Adler (1972) in which it was stated that psychodynamic literature has tended to focus on the patient while there has been a stark lack of self disclosure on the part of therapists. This is due, perhaps, to therapists' discomfort with certain feelings , and to discomfort related to exposing their failures in understanding, as well as their general fallibility (Adler, 1972).

Stamm (1997) states that research into the impact of emergency service provision is undoubtedly the best documented segment of the professional literature in the area of secondary traumatic stress (STS). Considerable attention has, therefore, been focussed on the experiences of emergency services personnel such as firefighters, paramedics, and police officers (Beaton & Murphy, 1995; Kopel & Friedman, 1998; Marmar, et al., 1996; Moran & Britton, 1993). In contrast, only a few publications exist in the area of trauma mental health caregivers due to the newness of the area (Stamm, 1997). The specific focus of the current study is the experience of non-professional trauma debriefers in the workplace. As such, while it is acknowledged that emergency service personnel may be affected by the experiences of the primary victims of a traumatic event, attention in this study and hence the literature reviewed, will be restricted to the potential impact of exposure to traumatic material on trauma mental health caregivers specifically.

Defining terms

Stamm (1997) argues that, "The great controversy about helping-induced trauma is not 'Can it happen?' but 'What shall we call it?'." (p.1). Various authors in this field, while all referring to the impact of being exposed to another's traumatic experiences by virtue of being in the role of a mental health caregiver, adopt different terminology. The four terms most commonly used in this context are compassion fatigue, secondary traumatic stress, countertransference, and vicarious traumatisation (Stamm, 1997). Another related concept is

burnout (Figley, 1995a, 1995b). The following discussion will highlight the similarities and differences between these concepts.

Figley (1995a) coined the term compassion fatigue to refer to the natural and disruptive by-products of working with traumatised and troubled clients (p.xiv). Compassion fatigue is seen as the likely outcome of compassion stress, which refers to the stress resulting from helping a traumatised person (Figley, 1995a). Figley (1995a) uses the terms compassion stress and compassion fatigue interchangeably with secondary traumatic stress and secondary traumatic stress disorder (STSD) respectively. As such, compassion fatigue is viewed by Figley as being identical to secondary stress disorder and is the equivalent of PTSD. In order to explain this point further Figley (1995a) outlines and compares the symptoms of PTSD and STSD. This comparison is presented in Appendix A.

Based on the reasoning that the key difference between STSD and PTSD is in terms of the time of occurrence (STSD by its very nature follows PTSD), Figley (1995b) proposes that the term should read 'primary traumatic stress disorder' and not 'post traumatic stress disorder' as every stress reaction occurs 'post' an event by definition. In discussing the nature of secondary traumatic stress and STSD, Figley (1995a, 1995b) shows that this concept is closely related to those of burnout and countertransference although key differentiating characteristics can be identified.

A myriad of definitions of burnout have been proposed by different researchers over the years. For instance, Pines and Aronson (1989) view burnout as a state of physical, emotional and mental exhaustion resulting from long term involvement in emotionally demanding situations. Other researchers in this field view burnout to be a process that begins gradually and becomes progressively worse (Maslach, 1982). Freudenberger (1974, 1986) describes the symptoms of burnout as depression, cynicism, boredom, loss of compassion, and

discouragement. On the other hand, Savicki and Cooley (1987) identify the most commonly portrayed symptoms of burnout to be emotional exhaustion; reduced personal accomplishment; and depersonalisation.

McCann & Pearlman (1990) claim that symptoms of burnout among therapists who work with trauma victims, may be the end result of continual exposure to patients' traumatic material that cannot be assimilated or worked through. They elaborate and argue that the symptoms of burnout may be analogous to the trauma survivor's numbing and avoidance patterns in that each reflects an inability to process the traumatic material (McCann & Pearlman, 1990).

Figley (1995a, 1995b) differentiates secondary traumatic stress from burnout and states that secondary traumatic stress can emerge suddenly and without much warning while burnout emerges gradually and is a result of emotional exhaustion. In addition, secondary traumatic stress has a faster rate of recovery from symptoms than burnout. Furthermore, Figley (1995b) argues that other distinguishing features of secondary traumatic stress are the experience of a sense of helplessness and confusion; a sense of isolation from supporters; and that the symptoms are often disconnected from the real cause. McCann and Pearlman (1990), while acknowledging the relevance of the burnout literature to people working with trauma survivors, concur with the idea that burnout is distinct from the potential impact of working specifically with traumatised individuals.

Countertransference is another concept that has been likened to secondary traumatic stress (Figley & Kleber, 1995; Stamm, 1997) Countertransference has its roots in psychodynamic therapy where it is viewed as an emotional reaction to a client by a therapist (Figley, 1995b; Stamm, 1997). More specifically, countertransference has been defined as the process of seeing oneself in the client, of over-identifying with the client, or of meeting needs

through the client (Corey, 1991) Lindy (1993) explains how countertransference precedes the treatment of a trauma victim and proceeds simultaneously along with each of the phases involved in a psychoanalytic approach to dealing with trauma victims. As such, Lindy argues that countertransferences are evoked by, first, the stereotypic views which interfere with the uniqueness of the individual's survivor experience and reactions. Second, countertransferences occur as the theories of trauma take shape to the objects, drives, and affects contained within these stories; and, finally, countertransference occurs in unconscious re-enactments within the treatment where the traumatic experience is revived (Lindy, 1993). According to Johansen (1993), countertransference includes all the emotional reactions of the therapists towards the patient irrespective of the source and may incorporate the life stressors of the therapist as well as the absorption of the traumata experienced by the therapist (Johansen 1993). The monitoring of countertransference tendencies is therefore a major activity requiring ongoing attention (Lindy, 1993).

In their discussion of the concept, McCann and Pearlman (1990) show that trauma literature does make reference to countertransference being viewed more broadly to include the painful feelings, images and thoughts that can accompany work with trauma survivors. Figley (1995a, 1995b) argues that secondary traumatic stress includes, but is not limited to, these conceptions of countertransference. He points out that researchers in this field assume countertransference only to happen in the context of psychotherapy and that it is a reaction by the therapist to the transference actions of the client. Also, countertransference has traditionally been viewed as a negative consequence of therapy and should be prevented or eliminated (Hayes, Gelso, van Wagoner & Diemer, 1991). However, the idea that countertransference is an impediment to therapy has been challenged and has instead been seen as having a vital place in the therapeutic process (Moosa, 1992). Nevertheless, Figley still

contrasts secondary traumatic stress and countertransference and proposes that the former is still seen as a potential negative ingredient in therapy while secondary traumatic stress is a natural consequence of caring between two people where the one has been traumatised initially and the other is affected by the first's traumatic experiences (1995a, 1995b). Moreover, these effects are not viewed as necessarily problematic to the outcome of the therapy but rather as a natural by-product of caring for traumatised people (Figley, 1995b; McCann & Pearlman, 1990). In discussing the differences and similarities between the concepts of secondary traumatic stress and countertransference, Stamm (1997) views countertransference as applying more to how therapists' patients affect the therapist's work with them, while secondary traumatic stress is about how therapists' patients affect their lives, their relationship with themselves, as well as their work.

While providing a rationale for their concept of vicarious traumatisation, McCann and Pearlman (1990) show that the literature pertaining to burnout and countertransference suggests that exposure to the traumatic experiences of others may be hazardous to the mental health of people close to them, including therapists involved in the victim's healing process. They go further and state that the literature on burnout suggests that the therapist is distressed because of the nature of the external event while, on the other hand, the countertransference literature attempts to explain the individual's responses as a function of his or her previous unresolved psychological conflicts. Vicarious traumatisation, the term coined by McCann and Pearlman (1990), is based on constructivist self-development theory which is interactive in that it views the therapist's unique responses to client material as shaped by both characteristics of the situation and the therapist's unique psychological needs and cognitive schemas.

The underlying premise of constructivist self development theory is that human beings

construct their own personal realities through the development of complex cognitive structures which are used to interpret events. Furthermore, these cognitive structures evolve and become increasingly complex over the life span as individuals interact with their environments (McCann & Pearlman, 1990). In line with the ideas proposed by Janoff-Bulman (1992), McCann and Pearlman argue that therapists may experience disruptions in their schemas about self and the world when they work with trauma victims thereby experiencing vicarious traumatisation.

Vicarious traumatisation is thus defined as "a process of change resulting from empathic engagement with trauma survivors. It can have an impact on the helper's sense of self, world view, spirituality, affect tolerance, interpersonal relationships, and imagery system of memory." Pearlman (1995, p.52). More specifically, the parts of the self that may be impacted by vicarious traumatisation are the following psychological need areas; safety, trust, esteem, intimacy and control (Rosenbloom, Pratt & Pearlman, 1995). These authors claim that any or all of these need areas may be affected to varying degrees depending on the individual trauma worker's psychological make-up, such as, the trauma worker's own trauma history.

Another key factor identified as having an impact on the trauma worker's experiences, and one which is of particular relevance to the present study, is the organisational context (Rosenbloom et al., 1995). Accordingly, the ways in which the organisation within which trauma workers operate, may support, undermine, or otherwise respond to the work they do, can have an influence on the nature of the trauma worker's response to the clients' trauma material. McCann and Pearlman emphasise that, just as PTSD is viewed as a normal reaction to an abnormal event, vicarious traumatisation should be viewed as a normal reaction to the stressful and sometimes traumatising work with victims (1995).

Rosenbloom et al.. (1995) identify the following features of vicarious traumatisation: (1) Its effects are cumulative as the impact of being repeatedly exposed to traumatic material may reinforce gradually changing beliefs about oneself and the world; (2) its effects can be permanent resulting in lasting changes in the way trauma workers think and feel about themselves, the world, and others; (3) the effects may be intrusive and painful even lasting after contact with a specific client; and (4) the effects of vicarious traumatisation are modifiable as there are things that trauma workers can do to minimise and ameliorate the negative impact of this work.

Trauma therapists are exposed to the painful images and emotions of their clients and thus may, over time, incorporate these memories into their own memory systems. As a result, they may find themselves experiencing PTSD symptoms including intrusive thoughts or images and painful emotional reactions (McCann & Pearlman, 1990). However, Pearlman (1995) highlights that the interaction with trauma victims need not always result in negative shifts in the cognitive schema of trauma therapists. Personal transformation may well be positive in the form of personal growth and a deeper connection with individuals and the human experience culminating in a greater awareness of all aspects of life (Pearlman, 1995, p.51).

Pearlman and Saakvitne (1995) state that while there is an overlap between secondary traumatic stress and vicarious traumatisation, they do, however, differ in focus and emphasis. These authors argue that secondary traumatic stress is based on a diagnostic conceptualisation of PTSD and, as such, focuses on observable symptoms while only acknowledging context and etiology. In contrast, Pearlman and Saakvitne view the primary focus of vicarious traumatisation to be the individual as a whole, placing observable symptoms in the larger context of human adaptation and quest for meaning.

In his writings Figley (1995a, 1995b) seems to equate vicarious traumatisation with

secondary traumatic stress and at times uses the terms interchangeably, as does Stamm (1997). However, Stamm (1997) goes further and explicitly states that in her view, secondary traumatic stress is the most appropriate term as it is broad and terms such as compassion fatigue, vicarious traumatisation and some types of countertransference should be viewed as specific types of secondary traumatic stress.

In conclusion, it can be seen in the above discussion that the concept of secondary traumatic stress is closely related to burnout and countertransference although some differentiating features between these concepts are evident. Vicarious traumatisation refers to a specific way of understanding the potential impact of working with traumatised clients and is clearly based on a cognitive processing model of viewing trauma. Based on the present author's understanding of these concepts it is proposed that the term secondary traumatic stress includes characteristics such as the symptoms similar to those in PTSD as well as the cognitive restructuring aspects inherent in the concept of vicarious traumatisation.

Theoretical models of secondary traumatic stress

As in the case of PTSD, a number of authors have developed theoretical models in an attempt to illustrate the nature of secondary traumatic stress and to provide a theoretical framework within which the findings from empirical studies can be interpreted .

Empathy is one of the key ingredients common to the explanations of the nature of the concepts discussed above, namely, secondary traumatic stress, countertransference, burnout, and vicarious traumatisation. Figley (1995c) gives due consideration to the role of empathy in his trauma transmission models as depicted in Figures 4 and 5.

Figure 4. Trauma transmission: A model of compassion stress (Figley, 1995c)

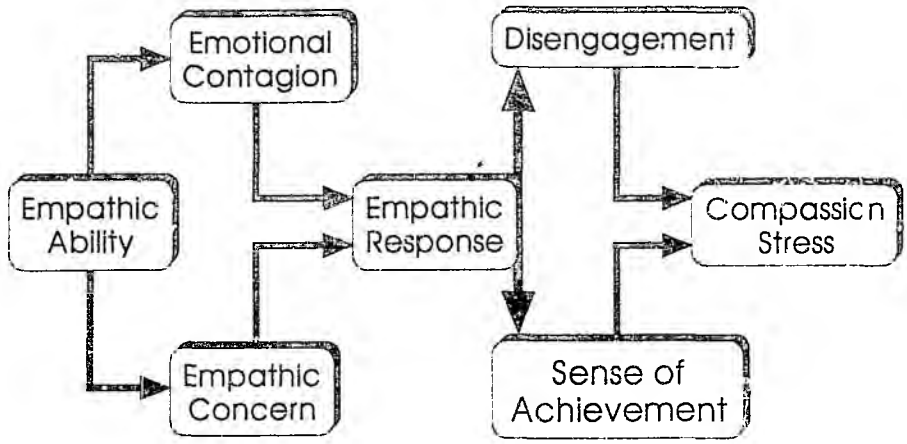
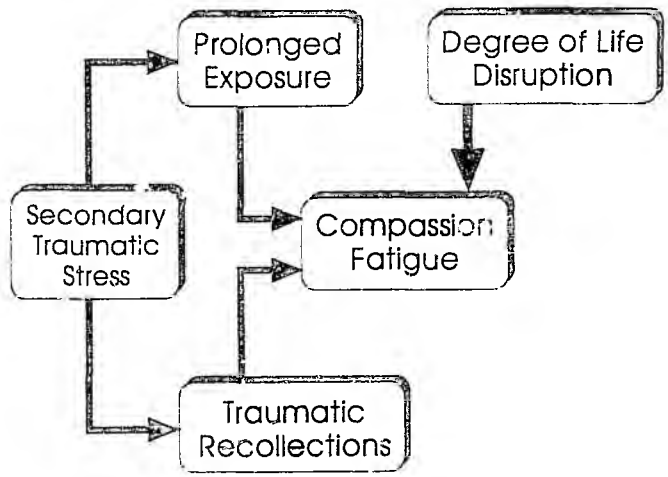


Figure 5. Trauma transmission: A model of compassion fatigue (Figley, 1995c)



A core component of this model is emotional contagion which Figley defines as "experiencing the feelings of the sufferer as a function of exposure to the sufferer." (1995c, p.252). Figley links emotional contagion to empathic ability which gives rise to the burnout of secondary traumatic stress. Empathy is thus seen as one of the four components that play a role in predisposing the helper to the burnout of secondary traumatic stress. The other factors include the helper's behaviour towards the trauma victim, the helper's difficulty in successfully disengaging from the process, or in experiencing a sense of satisfaction from helping. Accordingly, the meaning the helper attributes to his/her success will determine the helper's level of compassion stress. More specifically, the helper's appraisal of his/her empathic response in terms of low or high sense of achievement, coupled with the helper's ability to disengage from the helping relationship determines the helper's extent of developing compassion stress. Thus, a high level of emotional contagion, empathic concern, coupled with a high sense of achievement, can result in a low level of compassion stress.

Figure 5 illustrates the second component of Figley's trauma transmission model. Accordingly, compassion fatigue, a state of biological, psychological, and social exhaustion and dysfunction, is viewed as a function of four interacting components. Compassion fatigue is thus seen as resulting from prolonged exposure to traumatic stress and the ensuing traumatic recollections provoked by this exposure and compassion stress. Moreover, Figley claims that compassion fatigue is inevitable if, in addition to these three factors, the trauma caregiver experiences considerable life disruption , for instance, in the form of illness or a change in personal responsibilities.

In a further conceptual development, Dutton and Rubinstein (1995) identify three categories of secondary traumatic stress reactions. The first category refers to, psychological distress and includes symptoms such as distressing emotions; intrusive imagery; avoidance

efforts; somatic complaints; addictive behaviours such as substance abuse; physiological arousal; and impairment of day-to-day functioning in social and personal roles. These symptoms clearly parallel those of PTSD. The second category is concerned with cognitive shifts as described in the work of Janoff-Bulman (1992) and McCann and Pearlman (1990). The third and last category of secondary traumatic stress reactions identified by Dutton and Rubinstein is concerned with relational disturbances. Accordingly, the personal and professional relationships of trauma workers may suffer due to increased stress or difficulty with trust and intimacy.

Dutton and Rubinstein (1995) propose the following theoretical model for the understanding of the above categories of secondary traumatic stress reactions in trauma counsellors. The model consists of four components : (1) the traumatic event to which the trauma worker has been exposed, (2) the trauma worker's post traumatic stress reactions, (3) the trauma worker's coping strategies for responding to the traumatic situation and its psychological sequelae, and (4) the personal and environmental mediators of secondary traumatic stress reactions. As will be shown, this model is useful in identifying some of the core components inherent in secondary traumatic stress. However, in the text in which this model is proposed, the writers do not clearly indicate the nature and position of these components in relation to each other which does detract from the overall comprehensiveness of the model. Nevertheless, the four components outlined will be discussed and their contribution to the understanding of secondary traumatic stress will be evident.

According to Dutton and Rubinstein (1995), there are a number of unique features of the event to which the trauma worker is exposed. For instance, working with the aftermath of trauma involves more than just the exposure to the event but also involves the survivor's emotional reactions to the event (e.g., intense emotional pain, despair, rage, and

hopelessness). The trauma worker is also exposed to, and may have no control over, the re-victimisation of the survivor which may occur as a result of the institutional and other social responses to the traumatised individual (e.g., police investigations of people involved in a bank robbery). By the very nature of trauma work, the trauma worker is exposed to the realisation that a type of traumatic event does occur, has occurred, and may recur all of which may challenge the trauma worker's cognitive schema around aspects such as trust, safety, and life's meaning. In addition, the trauma worker's task may involve the need to help the survivor deal with previous traumatic events which may re-surface. Clearly, then, the very nature of the exposure to trauma material is quite unique in trauma counsellors. However, Dutton and Rubinstein (1995) acknowledge that traumatic events vary considerably in terms of their nature, severity, and duration, and that this variability may have implications for the extent of the secondary traumatic stress experienced by the trauma worker. These authors highlight the need for research into the implications for secondary "victims" of these types of variations in traumatic events (p.94).

Dutton and Rubinstein (1995) then discuss, separately, the coping strategies of trauma workers, and then the role of individual and environmental factors as potential mediating variables. It is at this point that the clarity of the model becomes questionable. In order to organise the points made by these authors in a more comprehensible manner, the current researcher will discuss coping strategies as an aspect related to potential mediators of the secondary traumatic stress reactions of trauma workers.

Dutton and Rubinstein (1995) make reference to the work of Antonovsky who found that coping responses are related to levels of stress (Antonovsky, 1990). These authors identify personal and professional strategies for coping. Personal strategies would include activities such as recreational activities and developing supportive relationships. Professional

strategies would include using peer supervision and diversifying one's professional practice. When discussing the potential mediating role of individual factors, Dutton and Rubinstein make reference to aspects such as (1) inner strengths or resources (e.g., self-esteem, professional experience and training); (2) personal or professional vulnerabilities (e.g. prior traumatisation; lack of adequate training); (3) countertransference (e.g. identifying with the client as a single mother); and (4) general satisfaction with professional and personal life.

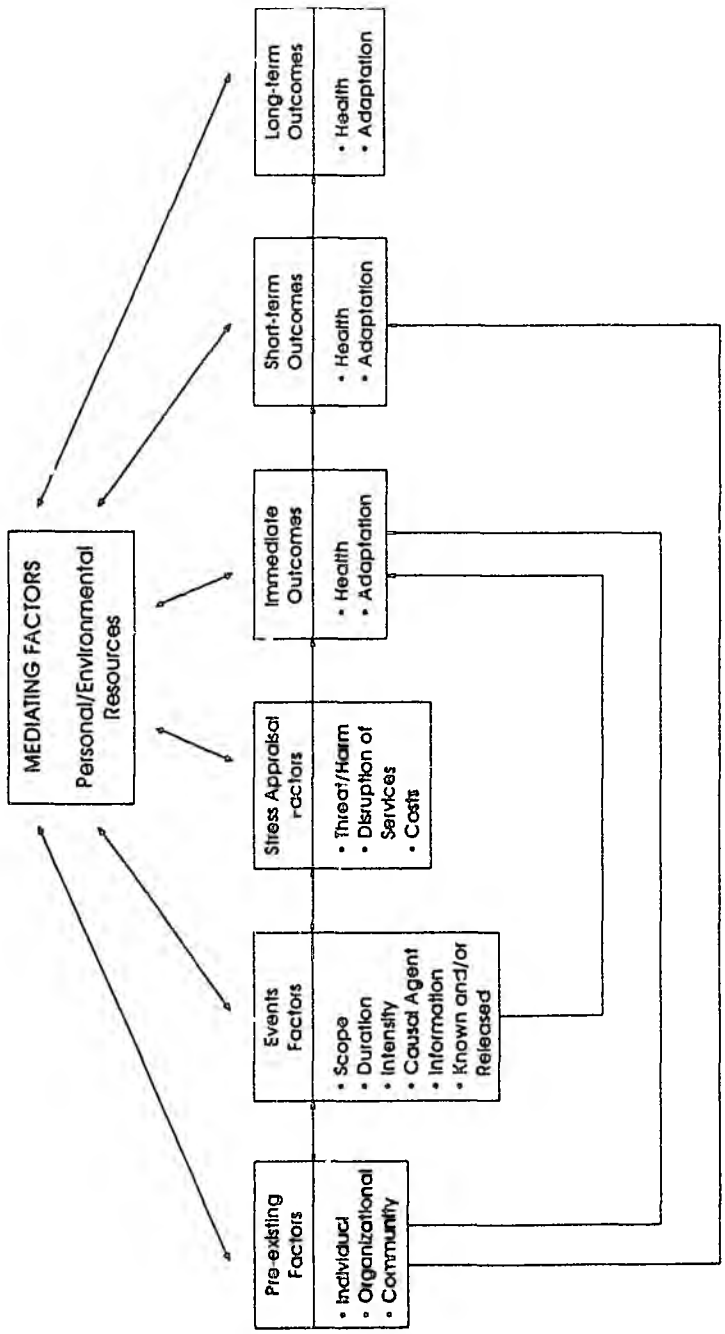
Potential environmental mediating factors include (1) personal and professional support; (2) other stressors in the trauma worker's life; (3) institutional or professional responses to the person's work: and (4) the social, political, and economic context in which the trauma worker lives.

As mentioned earlier, it is the contention of the current researcher that the authors of this theoretical model do not pay sufficient attention to some important conceptual issues. For instance, the notion of mediating variables is introduced with no explanation of the envisaged role of a mediator as compared to a moderator. The position and inter-relationship between the four components of this model would seem not to have been given sufficient attention as is evident in the authors' depiction of coping resources as separate from the individual and environmental mediating factors. Dutton and Rubinstein do emphasis the need for empirical studies investigating the nature and role of some of these components which will hopefully assist in explaining the nature and dynamics of secondary traumatic stress far more comprehensively, as has been the situation in the conceptual developments related to the understanding of trauma and PTSD.

Beaton and Murphy (1995) propose a theoretical systems model of, what they term, secondary traumatisation in crisis workers. They define crisis workers as "front-line first responders to whom potential exposure to occupational trauma is a fact of daily life." (p.51).

These authors, in developing their theoretical model, are clearly concerned with secondary traumatic stress as it applies to emergency services personnel such as firefighters, rescue workers, and paramedics. While the specific focus of the present study is on trauma counsellors rather than front-line emergency personnel, some of the concepts outlined in the model proposed by Beaton and Murphy can be useful in the understanding of secondary traumatic stress as it applies to trauma counsellors. The model proposed by these authors is shown in Figure 6.

Figure 6. Theoretical systems model of secondary traumatisation (Beaton & Murphy, 1995)



Beaton and Murphy (1995) review the pertinent empirical studies relevant to crisis workers and identify the following three major types of deleterious effects on crisis workers as a result of providing help: First, health consequences including both acute and chronic post-trauma symptoms; second, relationship disturbances; and lastly, substance abuse/misuse. Their categories of the negative consequences associated with trauma work, are similar to those identified by Dutton and Rubinstein as discussed previously. Similarly, Beaton and Murphy (1995) emphasise the uniqueness of the type of exposure to traumatic material that crisis workers encounter as being that these workers are repeatedly confronted with traumatic incidents.

Beaton and Murphy (1995) also highlight two key differences between the secondary traumatic stress reactions that crisis workers may experience and post traumatic stress reactions of primary victims. First, crisis workers view trauma as part of their every day life and are normally a self-selected group who are dedicated to saving lives. On the other hand, primary victims of traumatic events experience the incident as unexpected and an intrusion on their personal safety and well-being. Second, exposure to trauma in crisis work is repetitive and may have a cumulative impact, although experienced crisis workers have also been found to report lower post traumatic stress symptoms. As a result of these frequent, repetitive, and cumulative exposures to trauma, these authors claim that many crisis workers experience various post-trauma symptoms and have increased levels of stress-related morbidity and mortality. In addition, Beaton and Murphy state that the negative consequences arising from the nature of crisis work can spillover into other aspects of their lives resulting in relationship problems with family and friends, and possibly substance abuse.

In their proposed model, Beaton and Murphy (1995) identify a number of factors that may contribute to secondary traumatisation. As will be seen, these ideas are similar to those

proposed by Dutton and Rubinstein but, to the present author at least, seem to be more meaningfully incorporated in the Beaton and Murphy model. Under the category of Individual Factors, Beaton and Murphy (1995) highlight the following pre-existing individual and personal mediating factors that can contribute to work induced trauma: (1) preexisting life event stress; (2) personality ; (3) history of psychiatric symptoms; and (4) personal identification with the victim. Beaton and Murphy (1995) emphasise the need for empirical studies in this area so as to determine the nature and extent of the impact that these variables may have on work induced trauma. The few empirical studies that have been undertaken in these areas (e.g., McFarlane, 1988) have not yielded consistent results and have often been plagued by methodological limitations such as retrospective data collection te hniques (Beaton & Murphy, 1995).

One of the components of this model which is particularly relevant to the present study, is what Beaton and Murphy call the Organisational/Occupational context. These authors list the following organisational factors as having a potential influence on the recognition of and recovery from work induced trauma: (1) authority and chain of command, (2) size of the crisis worker organisation; (3) role conflicts and ambiguities; and (4) rank of the crisis worker. Accordingly, the cultural norms present in the crisis worker's organisation will possibly dictate how a given individual will respond to a traumatic incident. For instance, Beaton and Murphy (1995) mention that the fire-fighter culture is one that encourages group cohesiveness and an image of self-control where the discussion of personal vulnerabilities is not sanctioned.

Experience and training were identified as factors that may contribute to secondary traumatic stress reactions. More specifically, these authors refer to findings which indicate that training can reduce the impact of trauma and little prior trauma experience resulted in

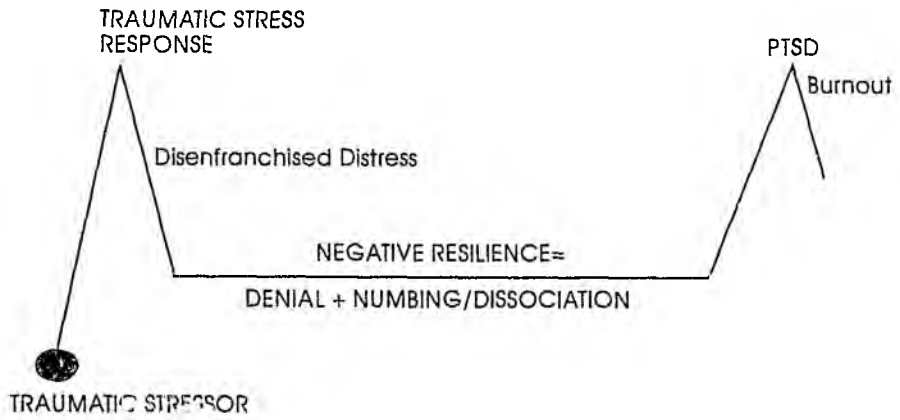
crisis workers being more susceptible to the effects of trauma exposure. Similarly, Semmer (1996) emphasises the role of training in a person's vulnerability to stress. Beaton and Murphy acknowledge the potential mediating role of social support as provided by significant others both in and outside of the work situation. However, once again, they note that the few empirical studies that have been conducted in this regard have methodological limitations. These authors do, nevertheless, report the findings from their study in which it was found that social support and home and at work correlated negatively with indicators of secondary traumatic stress (Beaton & Murphy, 1995).

Beaton and Murphy (1995) explicitly acknowledge that the above factors identified as potential contributors to secondary traumatic stress, have not been studied as extensively as have the consequences of exposure crisis workers' exposure to traumatic incidents. Moreover, as in the case of the model proposed by Dutton and Rubinstein (1995), the present author argues that Beaton and Murphy, have not given sufficient attention to the specific nature of the roles these factors are likely to play in the experience of work induced trauma. For instance, when discussing the role of factors such as the personality of crisis workers, it would seem that the term 'mediating factors' has been used rather loosely without due consideration on the inherent characteristics of mediators as opposed to moderators. This is a common limitation of studies in the social sciences and can result in considerable conceptual confusion (Baron & Kenny, 1986). (Readers are referred to Chapter 4 of the current dissertation for further elaboration and application of these concepts as operationalised in the present study.)

Another model that has been developed to explain the nature and dynamics of secondary traumatic stress in emergency personnel. is the Twin Peaks model developed by Friedman (1996). According to Friedman, the Twin Peaks Model (see Figure 7) was

developed in response to a need to organise the information related to exposure to continuous or multiple trauma as occurs in the case of people whose professions are ones that by their nature expose them to traumatic events on a regular basis, for instance, police officers. Friedman utilises research undertaken in the military as the foundation for this model (Friedman, 1996). The Twin Peaks Model illustrates the natural attempts made by people in these professions to cope with this continuous exposure to traumatic material and thereby aims to explain some of the problems associated with such attempts, and potential intervention strategies.

Figure 7. Twin Peaks Model (Friedman, 1996)



According to Friedman (1996) many novice emergency personnel will have traumatic stress symptoms on first exposure to a traumatic event. This is depicted in the first peak of the model and may result in the resignation of new recruits from this occupation. For those who remain, there will be a period of optimal functioning with emergency personnel describing

themselves as having become used to traumatic exposure. This period will extend for different periods of time depending on the rate of exposure and severity of trauma to which the new recruit is exposed. However, Friedman argues that at some later stage, for many if not most, something will happen that will destroy that resilience and the then seasoned emergency officer will move into the second peak, termed burnout or PTSD. Linking the two peaks in the model, Friedman introduces the concept of disenfranchised distress which relates to the process of distress being experienced but not allowed. This can therefore be seen as a form of negative resilience characterised by the psychological defence mechanisms of denial and numbing/dissociation.

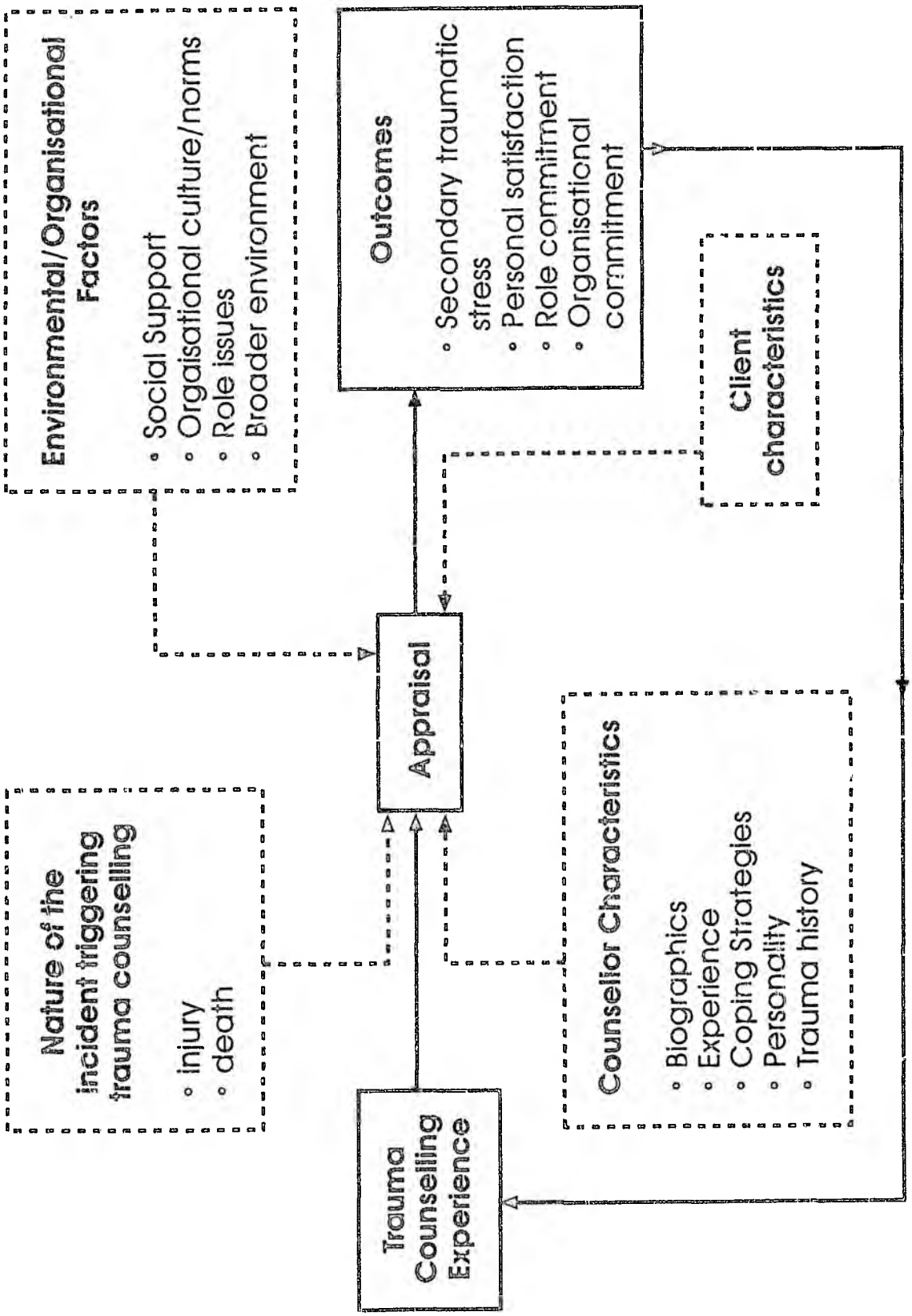
While the Twin Peaks model proposed by Friedman (1996) provides a useful framework for understanding the reactions of emergency personnel exposed to traumatic material on an ongoing basis, not enough attention is given to the mediating and moderating factors which may influence these reactions to this exposure. As such, the present author would argue that the potential influence of factors such as personality disposition, social support, and other contextual determinants (e.g., organisational factors) need to be given due consideration when focussing on the nature of emergency workers reactions to traumatic material.

Towards an integrated model of the individual counsellors' response to trauma work

In an attempt to integrate and further refine the ideas emanating from the above models the present researcher proposes the following systemic model of the nature of the experience of trauma work (see Figure 8). This model is eclectic as it emphasises the transactional nature of secondary traumatic stress i.e. the relation between the incident, the individual, and the environment. It highlights that secondary traumatic stress is a subjective phenomenon (thereby emphasising the role of cognitive appraisal in the process), based on psychological

processes and resulting in psychological, physiological, and behavioural consequences. This process is described as cyclical rather than linear as feedback components are specifically emphasised. See Figure 8.

Figure 8. Integrated model of counsellors' responses to trauma work (Author)



The first component of the model is the trauma counselling incident. Here, the particular factors to be considered include those relevant to the nature of trauma counselling as an activity. For instance, factors such as the repetitive and frequent nature of exposure to trauma material would distinguish the nature of secondary traumatic stress as experienced by trauma counsellors from that of post traumatic stress as experienced by primary victims/survivors. Furthermore, involvement in trauma counselling (in both a professional and non-professional capacity), and therefore exposure to traumatic material, is a self-selected activity as opposed to the unexpected and intrusive characteristics of traumatic events experienced by primary victims.

The second component of the model is the appraisal process. This component is concerned with the meaning that is attached to the trauma counselling incident and is influenced by five factors: First, the nature of the traumatic event which initiated the client seeking trauma counselling. Here attention needs to be given to characteristics of the traumatic event such as whether death or serious injury occurred and the extent of the client's involvement in the event. Second, the individual factors related to the trauma counsellor. It is proposed that factors such as the trauma counsellor's age, gender, previous and current life stressors, personality traits, training and trauma counselling experience, could influence the way in which a particular counselling session is viewed. The third factor suggested to have an influence on the appraisal process, is the actual client seeking trauma counselling. Here, it is envisaged that certain characteristics of the client could lead to over-identification on behalf of the counsellor and hence, influence the degree of empathy the counsellor experiences.

The fourth group of factors suggested to influence the appraisal process are the characteristics of the environment and the organisation in which the trauma counsellor operates. Here, one is particularly concerned with both family and work social support; role

issues (e.g., role conflict, role overload, and role ambiguity); the cultural norms in the organisation; as well as the broader environment and community in which the counsellor operates (e.g., a community plagued by criminal violence). At this point, it is suggested that these factors all influence the appraisal process but at this stage it would be inaccurate to stipulate whether this is in the form of either moderating, mediating or main effects.

The last component of the proposed model is the secondary traumatic stress reactions of the trauma counsellor. Here, it is acknowledged that exposure to trauma generally, and trauma counselling particularly, can have both constructive and destructive outcomes. This is in line with the thinking in the area of occupational stress where stress is not necessarily viewed as negative (Selye, 1976; Antonovsky, 1987). The more negative outcomes would be the psychological, behavioural and physiological manifestations of Secondary traumatic stress disorder, including termination of that occupational role. On the other hand, positive outcomes would refer to role satisfaction, heightened sensitivity to the vulnerability in others, and continued commitment to fulfil the responsibilities inherent in the work of a trauma counsellor.

There is a feedback loop from the outcomes to the first component which allows for the fact that the outcomes of trauma work are cumulative with different reactions emerging in the short, medium and long term. This is in line with the nature of traumatic stress as illustrated in the Twin Peaks Model proposed by Friedman (1996).

The model illustrated in Figure 8 and discussed there under, is an attempt to integrate the various theoretical models outlined in the literature reviewed and, therefore, aims to provide a more holistic conceptual understanding of the nature and impact of trauma work. At this point, it is appropriate to review the literature pertaining to empirical findings relevant to the impact of trauma work on the trauma mental health caregiver.

Empirical studies

As has been previously indicated, the concept of secondary traumatic stress as it applies to emergency services personnel is the most well documented aspect of secondary traumatic stress as seen within the context of the experience of helping professionals in the trauma field, generally. Stamm (1997) reiterates that secondary traumatic stress as considered within the context of trauma counsellors, is the least explored aspect within this new field. A review of the literature that does exist would support this contention as the studies that have been documented are mainly descriptive. It would seem that, to date, the experiences of clinicians have provided much of the existing anecdotal evidence of the phenomenon of secondary traumatic stress (Kassam-Adams, 1995). As such, attention has been focussed on the description of the manifestations and treatment of secondary traumatic stress as it applies to the trauma worker, and theoretical discussions of the phenomenon, but very little effort has been concentrated on empirical studies to identify the extent, nature, and dynamics of secondary traumatic stress as experienced by this group of trauma workers.

Moreover, the few existing studies that do explore the experiences of trauma counsellors do so within differing trauma contexts, for instance, disasters and violent crimes. In discussing the distinction between the mental health consequences of natural and human-made traumatic stressors, Davidson, Fleming and Baum (1986) note that the negative effects of disaster appear to be short-lived while the consequences of human-made disasters seem to be more long-lasting. Researchers in the field of secondary traumatic stress have not explicitly explored the impact on trauma counsellors of exposure to these different types of traumatic material. Nevertheless, although it is acknowledged that the context of natural disasters or human-made disasters may well exert a considerable impact on the responses of trauma counsellors working within those differing contexts, studies that have been identified within

both of these realms will be reviewed.

Raphael (1981) describes the sense of helplessness and frustration felt by many of the trauma workers following the Granville disaster. In addition, these trauma workers reported experiencing nightmares, psychosomatic symptoms, irritability, anxiety, and depression after the event. In discussing these findings, Raphael (1981) notes that the trauma worker's empathic response, together with heightened arousal, engagement, and the intense relationship often inherent in crisis work, brought pain, grief and distress to the acute awareness of the trauma worker. It is suggested that this, in turn, awakened in the helper his/her own grief and anguish about the event (Raphael, 1981).

Similarly, Berah, Jones and Valent (1984) studied the effects of working with disaster on mental health professionals and found evidence that both their emotional and physical health were affected. In particular, these researchers report that a large majority of their sample felt shocked, confused, and very tired. In addition, half of the group of mental health professionals in their study reported that they became ill, had accidents and all noticed changes in their smoking, eating or drinking habits. Even those who had extensive training and experience in trauma counselling interventions, found they were considerably stressed and experienced feelings of helplessness. These trauma counsellors worked as a team and more often in pairs, and it is this fact that prevented the negative effects from being even more pervasive in this group of trauma workers (Berah et al., 1984).

Bartone, Ursano, Wright, and Ingraham (1989) examined the effects on US Army Officers of offering family support to those bereaved by the 1985 Gander air crash. It was found that Officers were at increased risk for illness, psychiatric symptoms and negative psychological well-being for up to a year after beginning support work. Coping style, as indicted by an hardiness measure, and social support, were found to be important individual

factors moderating the stress experienced (Bartone et al., 1989).

In their work with victims of armed hold-ups, Talbot, Manton and Dunn (1992), report feelings of isolation, anger, powerlessness, hopelessness, and anxiety as well as the documented symptoms of burnout. These authors also report feelings of exhaustion and the experience of a number of somatic complaints. One interesting behaviour reported by these authors, and one which is of particular relevance to the current study, is their reports of feeling suspicious and fearful on entering banks as customers.

In another study, Hodgkinson and Shepherd (1994) examined the impact of disaster-related stress on 67 social workers offering psychological support to victims of two major man-made disasters, namely, the Piper Alpha North Sea oil production platform explosion and the Clapham Rail crash. These authors identify two major sources of disaster-related stress, namely, role-related difficulties (role conflict and role ambiguity) and contact with clients distress (identification). The subjects in this study reported that the role difficulties experienced were largely a result of the lack of established professional and time boundaries, uncertainty about appropriate goals, and a lack of information and training. Role problems were found to be a more powerful predictor of psychological symptoms than identification, while identification was found to be a more powerful predictor of well-being.

Sixty percent of the social workers reported experiencing significant levels of symptoms such as depression and feelings of inadequacy and insecurity, during the first year following their involvement in this project. Follow-up data showed that these symptoms were still experienced a year after their involvement in the project. However, despite these negative consequences, 85% of the sample felt that they had benefited from their involvement and that the effect of disaster-related work need not be uniformly negative. Coping style (hardiness) and prior life events (recent bereavement) were found to be the most important moderating

factors in predicting helper stress, while exposure, social support and professional experience appeared to be less relevant factors.

The authors of this paper identify a number of important practical implications of these findings. They suggest that selection strategies should aim to identify trauma workers who would be less vulnerable to becoming secondary victims. More specifically, they suggest that assessment of coping style and previous life events should be included in the process. They go further, and recommend that effective support should be given to trauma helpers beginning with the identification of a clearly defined task and management structure as well as training which focusses on both personal and professional issues.

Straker and Moosa (1994), examined the responses of 15 professional mental health workers (10 psychologists and 5 social workers) working with the survivors of South Africa's political repression and civil conflict. It was found that all 15 subjects reported feelings of powerlessness, and anger and outrage, while 10 subjects also reported feelings of anxiety and vulnerability. These findings are certainly in line with those of authors discussed previously, but the unique context in which this study was conducted needs to be noted. Straker (1994) emphasises that the context of continuing civil conflict and political repression may intensify the experience and resolution of the above identified reactions of the trauma workers. One of the key contributing factors to this phenomenon, is that survivors are at great risk of being re-traumatised due to the violence and continuous traumatic stress implicit in civil conflict (Straker, 1994). The impact on trauma counsellors related to this re-traumatisation of the survivors, is one that is of direct relevance to the present study given the culture of (criminal rather than civil) violence that is still currently evident in South Africa.

The types of consequences resulting from trauma work identified in the above studies were confirmed by Sloan, Rozensky, Kaplan and Saunders (1994) in their study of 140 police,

fire, medical, and mental health personnel who were involved in emergency work following a shooting in an elementary school. Of particular importance in this study, was the authors' ability to compare the reactions of the various types of emergency workers. These authors found that there was no statistically significant difference in the intrusive and avoidance symptoms reported by individuals in the five groups of emergency personnel. Mental health workers, on average, experienced the same degree of negative consequences of this trauma work as did the other groups of emergency personnel. In addition, these authors found that qualitatively heavy workload predicted intrusiveness and avoidance of thoughts both immediately after and 6 months after the incident. Time pressure and quantitatively heavy work load was also found to predict avoidance behaviours at the time of the incident. These results, once again, alert researchers in this field to the impact of organisational variables on the experience of trauma workers.

In a more recent study, Chrestman (1995) found that exposure to trauma was associated with increased symptoms of intrusion and avoidance among trauma therapists. However, Chrestman notes that the incidence of symptoms did not, on average, fall within the clinical range but were certainly more prevalent than those reported by a comparative group of therapists not involved with trauma work. Nevertheless, a number of therapists did fall within the clinical range of PTSD symptoms.

Chrestman (1995) reports that a number of variables were found to have a 'mediational' role between secondary exposure and therapist distress. For instance, increased professional experience was associated with decreased avoidance, dissociation and anxiety; increased income was associated with decreases in all symptoms; additional training was associated with decreased avoidance; increased number of trauma patients in a therapist's caseload was associated with increased levels of dissociation, anxiety, and intrusion; and

higher percentages of time spent in general clinical activities relative to other activities was associated with increased avoidance. Hence, participating in a variety of activities rather than engaging in full-time clinical work with survivors of trauma, was deemed to be advisable. Therapists who had a higher caseload of trauma patients were found to have less interactions with family and friends and sought professional interpersonal reactions more often.

Chrestman also reports that there were no significant differences in cognitive schemata as defined by Janoff-Bulman, between the trauma therapists and the non-trauma therapists. Trauma therapists reported increased efforts to protect themselves and their families from harm which the author states may well represent an awareness of real danger rather than phobic avoidance (Chrestman, 1995). These results confirm and add to those of the previously outlined studies. However, the author does not include information regarding the specific numbers involved in the study or the statistical techniques utilised in the analysis of the data. These limitations prevent other researchers in the field from being able to interpret these results accurately. This is especially the case as far as the mediating role of some of the variables is concerned.

Kassam-Adams (1995) conducted a study on 100 psychotherapists working in a number of outpatient agencies. The outcome variables were general work-related stress and psychological distress. Nearly half of the participants were found to report symptoms of intrusion and avoidance at the level indicating the need for clinical attention. General work stress was found to be significantly inversely correlated with the level of support therapists experienced in the workplace. The key finding in this study was that therapists' levels of PTSD symptoms was positively correlated with the level of exposure to sexually traumatised clients. In contradiction to the findings of other studies reported previously, Kassam-Adams did not find a statistically significant relationship between workplace characteristics (e.g.,

workload, availability of supervision and other forms of work-based support) and the level of PTSD symptoms reported. Gender (females were found to report higher levels of PTSD symptoms), prior trauma history, and exposure to sexually traumatised clients were found to be statistically significant predictors of PTSD. Subjects in this study also reported positive consequences associated with trauma work, namely, personal growth, spiritual connection, hope, and respect for human resiliency.

As can be seen from a review of the empirical studies in this area, there is certainly evidence of secondary traumatic stress symptoms and PTSD among different populations of trauma counsellors. However, there is a definite need for further studies utilising sound research designs in order to explore the incidence, nature and dynamics of secondary traumatic stress fully. Also the concept of positive spin-offs from trauma counselling has been referred to in some of the above studies and by Stamm (1995) and Yassen (1995). This aspect therefore also warrants investigation so as facilitate a thorough understanding of the experiences of trauma counsellors.

One aspect that is at times alluded to in the available literature in this area is that of professional versus non-professional trauma workers. Given that the focus of the current study is on the experiences of a specific sample of non-professional trauma workers, this aspect will be discussed further.

Non-professional trauma counsellors

Counselling services, as provided by non-professional counsellors in the organisational setting, have been in place for a number of decades (Macdonald, 1993). The utilisation of non-professional counsellors in South African organisations has largely developed as a result of the steadily increasing demand for the counselling of troubled employees on the one hand, and the relatively limited supply of professionally trained personnel, on the other (du Plessis,

1986). This concept has been extended to helping services offered in the trauma field (Sonderup, 1996). For instance, in the present study, the sample consists of a number of non-professional trauma counsellors who volunteer to offer their services on a part-time basis (i.e., over and above their c· ·ent full-time employment).

Wilson (1998) identifies a number of dimensions on which non-professional or lay counsellors can be differentiated from professional therapists. First, lay counsellors are often volunteers who receive no financial remuneration for their services. Second, lay counsellors generally p· ·vide their services on a part-time basis while professional therapists generally work in their specialised areas on a full-time, daily basis. Lay counsellors and professional therapists clearly differ from each other in terms of their training. Lay counsellors normally receive some form of short term training in the field in which they are going to work while professional therapists are required to complete a formal qualification in their field.

A number of studies have been undertaken to compare the relative effectiveness of lay counsellors. Buchanan (1979) found that non-professionals produced better results than mental health professionals in terms of the client's perceptions of the effectiveness of the counselling process. This was attributed to the energy, enthusiasm, and involvement displayed by these non-professional counsellors. Carkhuff, a well respected contributer to the field of training in counselling skills, also observed the positive impact made by non-professional counsellors. In particular, he found that, "Lay persons can be trained to function at minimally facilitative levels of conditions related to constructive client change in relatively short periods of time, and that lay counsellors can effect significant constructive change in clients." (Carkhuff, 1968, p.122).

Considering the role of the non-professional in the specific context of trauma counselling, Dyregrov, Kristofferson and Gjestad (1996) conducted a study in which the

reactions of voluntary and professional helpers in a disaster were compared. These authors found that voluntary and professional helpers experienced similar reactions during and after their involvement in disaster work. However, the magnitude of the reactions was somewhat higher among the volunteer group. Specifically, the volunteer helpers were found to report significantly more intrusion and avoidance symptoms of PTSD than the professional helpers. Dyregrov et al., (1996) report that the volunteer helpers experienced more difficulty about their reactions following the disaster than the professional helpers. These authors suggest that this finding was due to professional helpers having more work-based social support as they worked daily alongside colleagues in the same professional field. It was also found that the voluntary helpers were predominantly the ones to indicate that their life had changed its meaning following the disaster. More specifically, "many helpers had come to a greater sense of appreciation and care for their loved ones, they appreciated life itself more, felt that life was more intense, and they felt awe at people's strength." (Dyregrov et al., 1996, p.553).

Wilson (1998) recently completed a study conducted under the supervision of the current researcher in which the incidence, nature and impact of secondary traumatic stress in trauma counsellors was examined. This was an exploratory study in which semi-structured interviews were conducted on a sample of 10 full-time professional trauma counsellors and 10 part-time non-professional crisis counsellors working in the area of child abuse. In addition, Wilson administered the Compassion Fatigue Self-test for Psychotherapists (Figley, 1995a) on the combined sample. It was found that both groups of counsellors suffered from compassion fatigue as evident in their scores on the quantitative instrument as well as the responses received in the semi-structured interview. However, despite the fact that a strong and statistically significant positive relationship was found between subjects' burnout and compassion fatigue scores, on average the subjects were not found to be at risk of developing

burnout. No statistically significant difference was found between the compassion fatigue and burnout scores of the two sub-groups. Subjects from both groups reported feelings of helplessness, powerlessness, as well as feelings of estrangement from significant others in their personal lives. Subjects from both groups reported that they seldom feel the stressful effects of their counselling work for more than three days. A further finding of interest to the current study, was that months of experience in trauma counselling was not found to be statistically significantly related to subjects' burnout or compassion fatigue scores. One of the acknowledged limitations of this study was that the positive aspects associated with trauma work were not specifically explored.

The studies reviewed above highlight a number of consistent trends in the psychological impact of trauma work on trauma counsellors. However, one area in which conflicting findings have been reported, is the relationship between trauma counsellors' experience and secondary traumatic stress symptoms. For instance, Berah et al., (1984) report that even trauma counsellors who had extensive training and experience, were found to demonstrate symptoms associated with PTSD. Similarly, Hodgkinson and Shepherd (1994) and Wilson (1998) found that professional experience appeared to have a minimal role in the prediction of helper stress. In contrast, authors such as Chrestman (1995) and Dyregrov et al., (1996), report having found inverse relationships between trauma counsellors' professional experience and PTSD symptoms. This is clearly an issue warranting further examination in future studies.

The present study, with its focus on the experiences of non-professional trauma helpers in the organisational context, aims to provide further insights into the potentially positive and negative consequences of trauma work as experienced by this unique group of trauma counsellors.

In the literature reviewed pertaining to both trauma in general and secondary traumatic stress specifically, the concepts of resiliency and social support are repeatedly referred to as having an influence on peoples' reactions to trauma exposure. The following section will consider these two variables in more detail.

CHAPTER 4

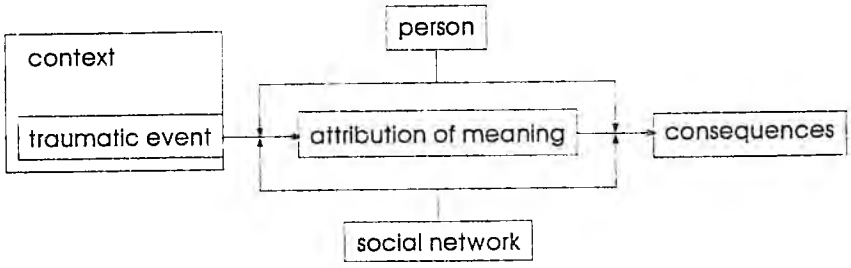
Sense of Coherence and Social Support

Overview

In the preceding sections a number of models have been presented as different ways in which trauma and secondary traumatic stress can be conceptualised. The idea that personal and environmental factors such as personality disposition and social support respectively, may influence the outcome of exposure to traumatic material was repeatedly alluded to (Green, 1993, 1994). In order to magnify the role of these variables, the following model developed by Kleber and Brom (1992), will be discussed. This is not to say that other authors have not given due consideration to these personal and environmental factors. However, this model is most useful here as it clearly explores the central role of variables such as personality disposition and social support.

Kleber and Brom (1992) argue against the notion of a linear relationship between the stress factor and stress reactions, stating that this view of stress is not sufficient for understanding the implications of traumatic experiences. In addition, these authors emphasise that this linear approach does not account for the consistently noted observation that not everyone reacts to a situation in the same manner. Instead, in line with many other authors in this field, Kleber and Brom advocate a model (see Figure 9) that places the concept of attribution of meaning at the core of the process of the relationship between a traumatic event and the possible consequences.

Figure 9. Stress model (Kleber& Brom, 1992)



The authors explanation of this model is as follows: The event is viewed as taking place within a context and as such a number of dimensions can be distinguished in a traumatic event. In discussing the role of attribution of meaning, and acknowledging the contribution of Lazarus and Folkman (1984) in this regard, these authors explain that people perceive an event in a certain way and therefore consciously or unconsciously, people interpret the circumstances and this interpretation strongly determines the ultimate outcome of a situation. The relationship between event and consequences is further affected by both personal variables and the individual's social network. Kleber and Brom highlight the role of personality disposition as one of the key personal variables to be considered. In summary:

> The perception of the stressor, as well as the nature of the stress reactions, personal factors and social relationships, determine the ultimate effects of an extreme event. (Kleber & Brom, 1992, p.130)

Elaborating further, Kleber and Brom (1992) acknowledge that the role of attribution of meaning does not account for the often long term effects of experiencing a traumatic

incident. These authors then turn to the concept of schemata which refers to general constructs of the self and the world, which guide individual thought and action, and help to comprehend the world. Accordingly, these authors show that the process of coping with a traumatic event can be viewed as an attempt to find meaning in what has happened and as an attempt to regain control over one's existence. In this way, the event and its implications are integrated into schemata. Based on this conceptualisation, Kleber and Brom call for multivariate studies emphasising the interaction between the various components of their model. These authors do, however, caution that while this model may be useful for structuring and highlighting observations, it is, nevertheless, only a model - there should be no pretension that the model exactly reflects reality.

The above model is most useful in helping researchers to conceptualise the role of person and environmental variables in the reactions to exposure to traumatic material. Furthermore, it assists in explaining why certain people respond differently to the same situation which in turn would include why some people have an overall positive perception of the impact that trauma exposure has had on them. Conceptual support for the key principles of this type of model is reinforced by Semmer (1996) who highlights the importance of considering individuals' beliefs about the world and their relationship with it, and most importantly, their possibilities of dealing with it, in an attempt to understand individuals' reactions to stressful events.

A number of studies have examined the role of personality disposition in the experience of stress and trauma. Arsenault, Dolan and van Amerigen (1991) focussed on the relationship between job stressors and mental strain in a sample of 760 full-time employees involved in hospital work. The role of locus of control in this relationship was explored and was found to correlate strongly with mental strain. This led the authors to suggest that in

future studies researchers need to adjust for locus of control when exploring the relationship between job stress and mental strain.

Depue and Monroes (1986) review [illegible] search related to impact of a life event and found that in every case, prior level of disorder was shown to be far more powerful in predicting subsequent disorder than the life event itself. As a result of findings such as this, Roskies, Louis-Guerin and Fournier (1993) argue that researchers should no longer seek to eliminate, via experimental and statistical controls, the influence of chronic states, but should instead aim to study their interaction with the specific stressor under consideration. This approach, they argue, should be extended to focus also on positive dispositional traits such as psychological hardiness (Kobasa, 1979) and Sense of Coherence (Antonovsky, 1987). Acknowledging the role of appraisal in the experience of stress, these authors propose that dispositional traits can strongly influence the number and type of situations perceived as stressful. They suggest that there is also a link between negative affectivity and social support in that individuals with low negative affectivity may have more resources, or perceive themselves to have more resources, such as social support and this is therefore another way in which personality disposition can influence the way a stressful event is responded to.

Roskies et al., (1993) put the above ideas to the test. These authors conducted a study in which the relationship between job insecurity and psychological distress was investigated. In addition, the role of positive and negative affectivity in this relationship was explored. Negative affectivity is a personality trait that encompasses, and is the underlying common disposition of, concepts such as trait anxiety, neuroticism, ego strength, and general maladjustment (Watson and Clark, 1984). Individuals high on this trait tend to accentuate the negative in appraising themselves, other people and the world in general; and experience chronically high levels of distress. On a sample of 93 reservations personnel of two different

airline companies (one company was exposed to acute job insecurity due to current retrenchments while the other was exposed to long term job insecurity as retrenchments had not occurred as yet), it was found that personality correlated most strongly with psychological distress: negative affectivity (r= 0.66; p<0.0001); and positive affectivity (r= - 0.53; p<0.0001). Furthermore, the results of hierarchical regressions showed that negative affectivity emerged as the single most important predictor of psychological distress in the context of acute job insecurity. When focussing on positive affectivity in the context of long-term insecurity, these positive personality attributes were found to exert as strong an effect on mental health as negative affectivity, albeit in the opposite direction. However, when considering the relationship between personality disposition and coping strategies, Roskies et al., (1993) found a significant but weak relationship between these variables. These authors conclude that future research efforts should be directed to understanding how personality interacts with job stressors. While the differences between traumatic stress and general stress are certainly acknowledged by the present researcher, in the light of the contentions made by authors such as Kasl (1990) regarding the similarities between these two conceptual fields, the findings of the study conducted by Roskies et al., (1993) with its focus on occupational stress are nevertheless still considered by the present researcher to be viewed as highly relevant to the current study with its focus on secondary traumatic stress in the workplace.

Another more recent study in the field of trauma is reported by Lam and Grossman (1997). These authors explored the relationship between protective factors and adult adaptation in women with and without self-reported histories of childhood sexual abuse. Protective factors were defined as characteristics which moderate the negative effects of stress in a way that protects individuals from maladaption. This concept is also referred to as resiliency by these authors. Findings indicated that higher levels of protective factors were

significantly associated with higher levels of functioning for all individuals (N=264) and that this was even more strongly evident in the sample of women who had experienced childhood sexual abuse.

Turning to the specific topic of work-induced trauma, McFarlane's (1988, 1989) longitudinal studies of 469 firefighters who had experienced the Australian bushfire disaster of 1983, are of particular relevance. The main focus in these studies was the investigation into the predisposing, precipitating and perpetuating factors associated with the course of PTSD amongst theses firefighters. In reviewing the literature pertaining to this disaster, McFarlane (1993) concluded that the studies demonstrated, firstly, an inconsistent link between intensity of exposure, and the development and duration of PTSD. Secondly, and of particular interest here, is that the importance of personality and other vulnerability factors in the etiology of PTSD was highlighted.

In another study focussing on work-induced trauma, Moran and Britton (1994) explored reactions to traumatic events in a sample of emergency services personnel. In contrast to McFarlane's findings, these authors did not find that personality (hardiness and defensiveness) contributed to predictions of either the severity or length of reaction to exposure to past traumatic incidents.

Clearly, even though previous research is not conclusive, personality disposition is an important variable to be explored in any study focussing on the nature and dynamics of stress in general (Schaubroeck & Ganster, 1991), and traumatic stress in particular (Kleber & Brom, 1992). However, the exact nature of this influence needs further investigation. There does not seem to be consensus in the literature as to whether personality disposition should be viewed as a moderator, a mediator, or a main effect.

The concepts of personality disposition, as operationalised by the Sense of Coherence

construct in the present study, will now be explored in more detail. This will then be followed by a discussion related to the other factor identified as having an influence on the nature of traumatic stress, namely, social support.

Sense of Coherence

"Although the world is full of suffering, it is also full of the overcoming of it."

(Helen Keller, 1904, p.7, cited in Strümpfer, 1995)

A number of authors have noted that, when faced with stressful situations, some individuals suffer from a number of undesirable effects, while others fare much better under the same conditions (Antonovsky, 1979, 1987; Lyons, 1991; McSherry & Holm, 1994; Semmer, 1996; Strümpfer, 1990, 1995). This has led to a focus on models of resiliency. Semmer (1996) summarises the three core characteristics of resilient people as: (1) resilient people tend to interpret the world as basically benign and one in which they do not expect intentional harm from others; (2) resilient people tend to view setbacks and failures in perspective and not necessarily indicative of their own incompetence, or indicative of a generally hostile world; and (3) resilient people tend to view life as something that can be influenced and acted upon with stressful events normally being seen as a challenge.

One of the seminal contributors to academic pursuit in the area of health proneness is Aaron Antonovsky and his construct of 'Sense of Coherence'. Aaron Antonovsky (1979), introduced the concept of 'salutogenesis'. This concept is derived from the Latin word, 'salus' which means health; and the Greek word 'genesis' which means origin and, as such, refers to the study of the origins of health. This line of thinking was prompted by Antonovsky's observation that the majority of medical studies have been undertaken from a pathogenic orientation while completely excluding the exploration of factors causing some individuals to stay healthy even when confronted by destructive agents (such as adversarial physical,

emotional, and social factors). As such, the primary focus of investigations into areas of health, stress and coping has been from a pathogenic orientation whereby the origins of disease has received extensive attention to the exclusion of attention given to factors that may predispose individuals towards health.

Antonovsky's primary contribution to the literature on stress and coping has been to initiate this major conceptual shift towards salutogenic thinking. This conceptual reorientation entails exploring why it is that some people in the population remain healthy despite the presence of ubiquitous stressors. Furthermore, this conceptual orientation entails the investigation of the contributing factors to the maintenance of some people's health, and even its enhancement, despite their experience of significant stress, while others similarly situated succumb to health breakdown.

Strümpfer (1995) extends Antonovsky's arguments supporting the concept of salutogenesis. He reviews Antonovsky's documented ideas and proposes that although Antonovsky coined the term salutogenesis he was, in fact, concerned with a more encompassing problem than investigations into the origins of health. Rather, Strümpfer proposes that Antonovsky was alluding to the sources of strength in general which goes beyond the concerns of health as usually construed, to include the strength to deal with general concerns such as finances, security conditions, and growing old (1995). Strümpfer thus suggests the term 'fortigenesis' as being more appropriate than 'salutogenesis' as this would refer to the origins of 'strength', and not merely 'health'.

Underlying all these conceptual arguments is the acknowledgment and incorporation of theories proposed by Selye (1976) and Lazarus and Folkman (1984). Selye argues that life and stress cannot be separated, and life without stress is death. As such, Selye makes a strong distinction between 'eustress' and 'distress' where the former refers to the pleasant, beneficial

variety of stress and the latter refers to the unpleasant, harmful variety of stress. Antonovsky, in his writings acknowledges this positive perception of stress and agrees that tension can be salutogenic (1987). He elaborates on this idea and extends it to adopt a transactional view of stress-outcome variables as put forward by Lazarus and Folkman (1984). Accordingly, Antonovsky observes that "if anything has been learned from the study of stressful life events, is that what is important for their consequences is the subjective perception of the meaning of the event rather than its objective character." (1979, p.93)

As such, Antonovsky (1987) views health and illness as existing on a health ease/dis-ease continuum whereby a person's position on this continuum is largely determined by the strength or weakness of that person's Sense of Coherence (SOC). Sense of Coherence is a personality construct defined as:

> ... a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; (2) the resources available to one meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement. (Antonovsky, 1987, p.19)

Sense of Coherence is therefore a three-component personality construct comprising Comprehensibility ([1] above), Manageability ([2] above), and Meaningfulness ([3] above). Antonovsky (1979) elaborates on the characteristics of these three components as follows:

Comprehensibility represents the extent to which the person perceives internal and external stimuli as clear, ordered, structured and consistent information. This then provides the basis on which the person can expect that these stimuli will in future also be orderable, explicable, and even predictable and as such make cognitive sense to the individual.

Manageability refers to a person's perception of the availability of adequate resources including those which are under the person's own control as well as those under the control of others. It therefore involves the sense that one will be able to cope with both desirable and undesirable life events.

Meaningfulness involves the emotional aspect of the Sense of Coherence construct as it refers to the emotional and motivational elements within a person's coping tendencies, i.e., the extent to which a person views events as challenges rather than as burdens or events with no importance. As such, this component refers to the extent to which the person feels that life makes sense, emotionally rather than cognitively

Much of the research on Sense of Coherence has focussed on the investigation of relationships between Sense of Coherence and various events and event outcomes. Research in this area only flourished following the development of the Orientation to Life Questionnaire as published in 1987 in Antonovsky's book titled, Unraveling the Mystery of Health. Based on the published and unpublished findings of these studies which used the Orientation to Life Questionnaire, Antonovsky published an article on the structure and properties of the scale (1993). In this article he concludes in support of the technical findings related to the construct validity of the scale, that the Sense of Coherence scale was developed specifically to measure a global orientation, and not to measure the components of manageability, meaningfulness, and comprehensibility separately. He does, however, acknowledge that some researchers have focussed on the three sub-scales separately based on theoretical interest in the nature of these components. A similar approach is adopted in the present study

The Sense of Coherence model, as proposed by Antonovsky (1987, 1979), therefore refers to a global perceptual disposition thought to underlie specific coping strategies. Antonovsky proposes that Sense of Coherence develops by about 30 years of age and that this

development occurs in proportion to one's experience of the world as predictable and consistent, as well as the ability to shape life outcomes (Antonovsky, 1993; Antonovsky & Sagy, 1986). Furthermore, the formulation of Sense of Coherence is dependent on the availability of 'generalised resistance resources' (GRR) which refers to any characteristic of a person, a group, or the environment that can facilitate reducing or eliminating the effects of stress (Antonovsky, 1979). GRRs therefore may be material such as food or money, cognitive such as intelligence or knowledge; interpersonal such as social support, as well as macrosocial such as religion (Strümpfer, 1995). A strong Sense of Coherence enables a person to mobilise GRRs to combat stressors thereby strengthening the person's Sense of Coherence via a feedback loop (Antonovsky, 1979). A person who has a weak Sense of Coherence is likely to be unable to mobilise adequate resources, culminating in health breakdown (Antonovsky, 1987; Semmer, 1996).

There is a strong link between Kobasa's (1979) construct of hardiness and Sense of Coherence, as was evident in the consistent use of these two constructs in empirical studies with similar focus cited earlier. Both constructs relate to global orientations of health proneness (Kravetz, Drory & Florian, 1993) and are based on the assumption that how one sees the world is a decisive factor in coping and health outcome (Antonovsky, 1987). The three sub-components of each of these constructs have been reviewed to determine their similarities and differences (Kravetz et al., 1993; Semmer, 1996). Considerable conceptual overlap has been identified between the meaningfulness component of the Sense of Coherence and the commitment component of hardiness (Antonovsky, 1987). However, subtle conceptual differences are evident between the manageability component of Sense of Coherence and the control component of hardiness (Antonovsky, 1987, 1991). According to Antonovsky (1987), the control component of hardiness is culture bound and is narrow in its

focus as compared to that of the manageability component of the Sense of Coherence construct.

Even fewer similarities have been found between the comprehensibility component of Sense of Coherence and the challenge component of hardiness as the former stresses stability while the latter emphasises change (Kravetz et al., 1993). More specifically, comprehensibility is viewed by Antonovsky (1987) as the core of the Sense of Coherence construct in that it emphasises seeing the world as ordered, predictable, and explicable. Comprehensibility thus refers to an orientation of stability as the normative mode of life rather than the orientation to change as suggested in the challenge component of hardiness (Antonovsky, 1987, 1991). Hence, while there is certainly some overlap between these constructs and their sub-components, Sense of Coherence and hardiness should not be equated (Antonovsky 1987, 1991). Given these conceptual differences, it was decided to utilise Antonovsky's Sense of Coherence construct rather than the construct of hardiness in the present study. Moreover, in the light of the conceptual nature of traumatic stress in general, and secondary traumatic stress in particular, as discussed previously, the conceptual underpinnings of the Sense of Coherence construct was considered by the present author to be more congruent with the focus of the present study as compared to the other measures of orientation to health proneness.

Another area of debate over the construct validity of Sense of Coherence, relates to the relationship between Sense of Coherence and negative affectivity. The question has been posed as to whether Sense of Coherence is really an indicator of negative affectivity (Semmer, 1996). Kravetz et al., (1993) investigated the nature of the relationship between, SOC, hardiness, locus of control, and negative affectivity (as indicated by measures of anxiety, depression, and anger arousal). More specifically, these researchers aimed to determine whether measures of health proneness are negatively correlated with measures of negative

affect simply because the former are positively scored indices of negative affect or whether these two sets of measures represent two distinct, yet related, constructs. Using a structural equation approach, these authors found that the model that best fitted their data was one with two latent variables, namely, health proneness (Sense of Coherence, hardiness and locus of control) and negative affect. These two latent variables were found to be highly correlated (r= -.59) but not identical. Furthermore Kravetz et al., (1993) found that aspects of the Sense of Coherence measure did overlap with the negative affect measures more so than did the measure of hardiness. Semmer (1996) identifies the need for more research into this area but concludes that the most plausible current explanation of the relationship between Sense of Coherence and negative affectivity is that identified by Kravitz et al., (1993), namely, they are two distinct but strongly related constructs.

The role of Sense of Coherence has been explored in various fields, such as health psychology and occupational psychology. In the field of health psychology, for instance, McSherry and Holm (1994) found Sense of Coherence to be negatively correlated with a number of physical and psychological symptoms, including anxiety, depression, and an array of physical ailments. Similary, Flannery and Flannery (1990) found Sense of Coherence to be negatively correlated with life stress and symptoms of psychological distress. These authors' findings also seemed to indicate that Sense of Coherence may not be a specific buffer or moderating variable. Instead, based on their findings, Flannery and Flannery (1990) suggest that Sense of Coherence be considered rather as a more basic global predisposition to responding to life stress. This proposal is in line with Antonovsky's conceptual formulation of Sense of Coherence as he argues that Sense of Coherence appears to mitigate life stress, but is not considered to be a specific buffer variable in its own right (1987, p.138). As such, Antonovsky proposes that Sense of Coherence addresses the overall quality of an individual's

behaviour and not the individual's specific responses to specific situations (1993).

Despite the proposal that Sense of Coherence be considered as a main effect variable (i.e., an independent variable in its own right) rather than a moderator, numerous studies have explored its moderating impact. For instance, within the South African context, Virtue and Jansen (1996) found statistically significant negative correlations between Sense of Coherence and physical symptoms of ill-health; and statistically positive correlations between Sense of Coherence and general psychological well-being. Consistent support for the role of Sense of Coherence as a moderator was not evident in this study (Virtue & Jansen, 1996).

Within the field of occupational psychology, Strümpfer (1990, 1995) and Strümpfer, Danana, Gouws and Viviers (1998) cite a number of studies undertaken under Strümpfer's supervision in which statistically significant relationships were found between Sense of Coherence and job satisfaction within various South African occupational settings. For instance, Fritz (1989) explored the role of Sense of Coherence as a potential moderator between job-related stressors and health-related outcomes in a sample of 194 data processing individuals. Sense of Coherence was found to relate to some of the stressors and outcome variables and as such lent partial support to the interpretation of Sense of Coherence as having a main effect relationship to stressor and outcome variables. In addition, partial support was found for the role of Sense of Coherence as a moderator as it was found to moderate between 12 of the 54 possible stressor-outcome relationships.

Semmer (1996) provides some additional reasons for Sense of Coherence emerging less consistently as a moderating variable in the relationship between stress and outcome variables. First, Semmer notes that moderated multiple regression procedures tend to yield very conservative estimates of interaction effects. Furthermore, he proposes that resourceful belief systems, of which Sense of Coherence is an example, may change the appraisal of the

stressor in the first instance. Semmer proposes that this influence on the appraisal process may occur at an even earlier stage of the specific stressor-strain relationship. In support of this, he cites research which has shown that there may be a tendency for people low in these health proneness resources to end up in more stressful situations, for instance people high in negative affectivity have been found to be more likely employed in high-stress jobs. These points, together with the previously discussed association between negative affectivity and SOC, may therefore result in moderating effects being less frequently identified in empirical studies with main effects emerging more often instead.

Pitman (1996) notes the irony in the fact that, although Antonovsky's conceptualisation of Sense of Coherence was largely based on phenomenological interviews with resilient survivors of the Holocaust, the construct has, until recently, received very little attention in the field of psychotraumatology. In an attempt to address this anomaly, Pitman (1996) conducted a study in which he investigated the relationships between PTSD symptomology and Sense of Coherence in a sample of cash-in-transit security personnel. Results indicated a significant negative relationship between PTSD symptomology and the Sense of Coherence sub-construct, Manageability (Pitman, 1996). Unfortunately, the small sample size obtained detracts from the overall significance of the findings from this study.

The role of Sense of Coherence in different contexts is clearly an area rich in exploration opportunities. One aspect that certainly needs to be addressed specifically, is the precise nature of the influence of Sense of Coherence in various stressor - stress reaction situations. The literature reviewed in this study consistently points to the importance of personality disposition in the manner in which a traumatic event is responded to, yet in the literature, personality disposition in this relationship is viewed simultaneously as a mediator, a moderator, a buffer, and a variable with a main effect that is an independent variable. It would

seem, then, that researchers in this field need to address not only the question as to whether personality disposition influences an individual's response to exposure to traumatic material; but should be more specific and should address the question pertaining to the precise nature of the influence of personality disposition in this situation. The current research attempts to respond to this challenge in that Sense of Coherence is statistically tested to determine whether it has a moderating or main effect influence on the experience of trauma debriefers in the workplace. In the next section on social support, an explanation of the difference between moderators and mediators will be provided in support of the present researcher's focus on Sense of Coherence and social support as a moderators rather than mediators.

Social Support

Murphy (1988) notes that although knowledge regarding social support has increased exponentially in the last decade, there is still a lack of clarity into the precise manner in which support prevents or relieves stress. Furthermore, this lack of clarity is exacerbated by the complex issues surrounding the very definition of social support. For instance, some authors have produced definitions which are all-encompassing and as a result are, in actuality, vague as they fail to highlight the essential elements and processes involved in the conceptualisation of social support (Flannery, 1990; Jacobson, 1986; Murphy, 1988). In response to criticisms of this all-encompassing view of social support, authors have proposed that social support be conceptualised as a multidimensional construct, consisting of a number of components which can be specified and operationalised.

One definition of social support developed from this perspective which has received the sanction of a number of researchers in this area, is that proposed by House (1981). Accordingly, House (1981, p.39) defines social support as, "an interpersonal transaction

involving one or more of the following: (a) emotional concern, (b) instrumental aid, (c) information, and (d) appraisal". In this conceptualisation of social support, emotional concern refers to caring, trust and empathy; instrumental support incorporates practical or financial aid; informational support involves the provision of information or skills which are helpful in finding solutions to a problem; and appraisal support is manifested in the feedback given to a person as an evaluation of personal performance (House, 1981). Moreover, in an interpersonal relationship, House proposed that these four components can either exist alone or as part of an integrated whole.

Apart from the controversy surrounding the definition of support there are two other issues that have received consideration of researchers in this field. The first issue, revolves around the importance of distinguishing between perceived support and received support as the amount of help actually received is not always related to perceptions of being supported (Cook & Bickman, 1990; Sarason, Sarason, & Pierce, 1990; Wethington & Kessler, 1986). This idea of incorporating an element of appraisal in the manner in which social support is conceptualised, is in keeping with the ideas surrounding the role of Antonovsky's Sense of Coherence construct in an individual's response to a stressful or traumatic incident. Considered from this perspective, the construct of manageability, a sub-component of Sense of Coherence, includes the individual's perception of having adequate access to effective social resources and support systems. It is can therefore be argued that, if a person is facing a stressful or traumatic incident and is able to maintain a strong sense of manageability, which will presumably include a perception of adequate social support, then this may be related to improved coping (Antonovsky, 1987; Cohen & Wills, 1985; Strümpfer, 1995).

Another concern of researchers in this area is whether social support should be measured as a main effect or moderator ('buffer') variable. It is this lack of precision in the

way in which social support has been conceptualised in empirical studies that has lead to the erratic findings in studies investigating the role of social support in the experience of stress and trauma (Flannery, 1990; Kaufmann & Beehr, 1986; Murphy, 1988; Sarason et al., 1990). Social support, seen from a main effects perspective, is seen to act as an antecedent to stressors and thus protects individuals from negative health outcomes (Murphy, 1988). Furthermore, a lack of social support, considered from this perspective, would be considered a stressor or direct cause of strain (Kaufmann & Beehr, 1989). Social support is accordingly considered to be inherently beneficial irrespective of whether or not the individual is under stress (Cohen & Wills, 1985). This view has Bowlby's attachment theory at its foundation which suggests that the need for social support is biologically entrenched, is present from birth, and is indispensable for physical safety, survival, and emotional satisfaction (Flannery, 1990). An example of this conceptualisation is evident in the interpretation of the results of a study reported by Antonovsky (1979) in which the best predictor of angina in men was found to be the perception of love by one's spouse.

Conversely, the buffering hypothesis maintains that low levels of support are not inherently stressful but in situations of high stress (or trauma) persons who have high levels of support reportedly have less negative health outcomes than those with lower levels of perceived support (Kaufmann & Beehr, 1986; Murphy, 1988). Thus, support is seen as protecting people from the deleterious effects of stress and if no stress is present, the support will have a weaker effect (Cohen & Wills, 1985). In summary, a main effect of support is said to occur in the absence of a stressor, while a buffering effect occurs in its presence (Jacobson, 1986).

Empirical support has been found for both the main and buffering hypotheses, which has led Cohen and Wills (1985) and Sarason et al., (1990), in separate meta-analyses

exercises, to conclude that social support may affect health in both direct and indirect ways and that the buffering and main effects hypotheses are therefore not mutually exclusive. Furthermore, Cohen and Wills (1985) found stronger evidence for the buffering model when the social support measure assessed interpersonal resources that are responsive to the needs elicited by the specific stressful event; while evidence for the main effect model was found when the social support measures assessed a person's degree of integration in a large community social network.

However, as in the case of Sense of Coherence, the current researcher has identified a further issue which results in a lack of clarity surrounding the role of social support. Researchers and authors in this field consistently use the terms 'mediator', moderator, and 'buffer' variables interchangeably. This trend has also been noted by Baron and Kenny (1986) who attempt to clarify the distinctive characteristics of these variables. According to Baron and Kenny, a moderator is a qualitative or quantitative variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable. On the other hand, these authors state that a variable is considered to be a mediator if it is identified as the active organism which intervenes between stimulus and response. In other words, the effects of stimuli are mediated by various transformation processes internal to the organism.

Considered from this perspective, it is clear that Sense of Coherence and social support are potential moderators rather than mediators as they have the potential, conceptually, to alter the strength of a relationship between the traumatic incident and the individual's reactions to it; but they are not the actual appraisal processes through which the external event is subjectively evaluated. This distinction is critically important. Whether one views a variable as a moderator or mediator will determine the statistical procedures used to test their

significance as well as having a vital influence over the way in which findings are interpreted.

Despite the fact that clinicians and researchers in the trauma field have intuitively understood the importance of social support in the experience of trauma (Herman, 1992; Kleber & Brom, 1992), Flannery (1990) notes that very few studies have focussed specifically on the relationship between social support and trauma. Moreover, as will become evident from a review of some of the studies that have been undertaken in this area, findings regarding the role of social support in this context are inconclusive. One contributing factor to these inconclusive results may be the differences in the types of traumatic exposure referred to, as well as the different instruments used to measure social support and the consequences of exposure to traumatic events. Therefore, the following review of the research conducted in this area needs to be considered in the light of this inherent limitation.

Bluen and Edelstein (1993) examined the relationship between emotional support offered by a trade union and psychological distress four months after an underground explosion in a South Africa gold mine. Union support was found to have a significant and inverse relationship with psychological distress. Another study investigated the effects of perceived availability of social support on psychological symptomatology following a major flood in Virginia (Cook & Bickman, 1990). Based on the self reports of 96 subjects, Cook and Bickman found that perceived availability of social support was not related to distress immediately following the disaster nor 5 months afterwards, yet social support and symptomatology were significantly correlated during the intermediate period.

Leyman and Lindell (1990) report the findings of an exercise in which 221 bank employees who were holdup victims were interviewed. These authors found that the most important groups providing social support were relatives, friends, and co-workers. A particularly interesting finding was that considerable differences were found between males

and females with regard to receiving social support. Women were found to have a higher level than men, of the social competence required to activate social support in their social network. In a longitudinal study conducted by Murphy (1988) in which the role of social support was examined in a sample of 155 individuals following a disaster, social support was not found to 'mediate' disaster stress. However, as mentioned earlier, a lack of conceptual clarity is evident in this study as the author refers to social support as a buffer, a moderator, and a mediator.

Esprey (1996) investigated the post-traumatic stress response of a sample of Black South African township residents who were victims and witnesses of continuous civil violence. The moderating influence of perceived social support on the traumatic event/traumatic stress interaction was also explored in this study. Perceived social support was not found to moderate this relationship. Instead, perceived social support emerged as an independent variable which significantly predicted the experience of post-traumatic stress symptoms.

In a study which is of direct relevance to the current research, Richards (1994) reported that following a traumatic incident in the workplace (e.g., bank robbery), the role of positive management support is vital. Seventy-five percent of the bank employees in this study viewed a letter, a gift or a meal out, as a positive caring management gesture. This author concludes by stating that in this context, organisational responses are at least as important as the provision of professional counselling services if recovery from the event is to occur.

Clearly, social support in the context of trauma has a critical role to play and further studies with enhanced research designs (Flannery, 1990) are needed to ascertain the precise nature of the influence of social support in this context. Taking this point further, and with the topic of the present study in mind, it is important to consider the role of social support in the reactions of trauma counsellors. This, then, leads to a consideration of the issues related to

caring for the care-givers.

Debriefing the debriefers

Earlier it was shown that there has been very little attention given to the investigation of secondary traumatic stress in trauma counsellors. However, while there has been a lack of empirical research in this area, one aspect that has received considerable attention is the need to care for the care-givers. The aim of any intervention in this regard is to help trauma care-givers to deal with the traumatic stressors inherent in trauma work so that problems do not subsequently arise (Raphael, 1986). More specifically, Raphael explains that the aim of debriefing trauma workers is to explore the trauma worker's experiences in this role and to allow frustrating and negative experiences, with associated feelings, to be ventilated. In addition, Raphael states that positive aspects are reviewed so as to balance the picture and help with integration. Talbot, Manton and Dunn (1992) expand on these points and emphasise that an additional aim of debriefing debriefers is to help the debriefers to utilise the knowledge gained from the trauma exposure so as to enhance their skills and psychological understanding for future work.

Although the above points are generally applicable to all such interventions, a number of different types of interventions have been suggested by clinicians in this field. Some advocate a team-based approach (Munroe, Shay, Fisher, Makary, Rapperport and Zimering, 1995); others suggest interventions focussing specifically on issues within the framework of the theory underpinning vicarious traumatisation (Rosenbloom, et al., 1995); while still others work from a countertransference paradigm (Straker, 1993; Straker & Moosa, 1994). Just as there is intuitive support for the role of social support in combatting the deleterious effects of exposure to traumatic events, the major contribution of authors in the field of secondary traumatic stress has been to emphasise the critical need for professional support for trauma

workers (e.g., Cerney, 1995; Figley, 1995a, 1995b, 1995c; Harris, 1995; Lindy, 1993; McCammon & Allison, 1995; McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995; Stamm, 1995; Talbot et al., 1992). To date, there is a dearth of empirical studies in which the role of social support in the reactions of trauma counsellors is specifically investigated. In response to this gap in the available literature, the present study will examine the role of social support generally, and issues related to the debriefing of debriefers specifically, in the experience of non-professional trauma debriefers in the workplace.

Rationale for the current study

The literature reviewed in the preceding chapters has aimed to provide a clear conceptual foundation for the present study. In addition, the literature reviewed serves to highlight a number of areas warranting further research. While a great deal of attention has been dedicated to investigating the reactions of people experiencing trauma directly, relatively little research has focussed specifically on the concept of secondary traumatic stress. This dearth in empirical studies in the area of secondary traumatic stress is even more evident in relation to the experiences of trauma counsellors as opposed to other employees who are exposed to job-induced trauma (e.g., paramedics, police officers, and firefighters).

The literature shows that organisations, such as banks, are increasingly becoming the context in which employees fall victim to acts of criminal violence. This has lead to some organisations introducing trauma intervention programmes. This organisational trend has opened the way for empirical studies that may contribute to our understanding of secondary traumatic stress, generally, and as it would apply to trauma counsellors, specifically. Furthermore, the workplace context in which these trauma programmes are active, provides the opportunity to explore the impact of organisational variables on the experiences of trauma debriefers. As such, the relative impact of organisational factors such as managerial

commitment, training effectiveness, role issues and intervention co-ordination strategies, on the experience of trauma debriefers can be investigated. In addition, this particular context allows one to explore the potential relationships between the experiences of being a trauma debriefer and work attitudes, such as job satisfaction and organisational commitment. Findings from studies with this focus will clearly have considerable theoretical and practical implications.

When reviewing the literature pertaining to both trauma and secondary traumatic stress, it was noted consistently that social support and personality disposition are key variables in the manner in which individuals respond to traumatic material. As such, these variables have been identified as being important to include in any investigation of peoples' responses to exposure to traumatic material. Antonovsky's Sense of Coherence has been identified as a construct that may well play an important role in determining the way in which a person deals with trauma. While this notion seems conceptually sound, very little research has focussed on the role of Sense of Coherence in an individual's response to exposure to traumata. This is clearly another avenue rich in research exploration opportunities. Once again, empirical studies that specifically examine the moderating and main effects of Sense of Coherence and social support will extend our understanding of the nature of both primary and secondary traumatic stress.

The current study aims, therefore, to meet the challenge of addressing these research opportunities by exploring the experiences of non-professional trauma counsellors in the workplace. Part 2 of this dissertation will thus focus on the current study : its conceptual framework; specific aims and objectives; methodology; findings and, relation to the literature reviewed.

PART 2 : THE CURRENT STUDY

CHAPTER FIVE

Overview

Introduction

Part 1 of this dissertation provided an overview of the relevant literature pertaining to the current study. From this overview, a number of areas warranting further research have been identified. The broad objective of the current research is to attempt to make a contribution to the current understanding of trauma counselling within organisational settings. More specifically, the aim of the current research study is to explore the individual and organisational antecedents and consequences of the experience of a sample of non-professional trauma debriefers in the workplace. In the present study, the terms 'trauma debriefer', 'trauma counsellor', and 'trauma caregiver' are, at times, used interchangeably.

One of the unique aspects of the present study is its focus on a trauma-related issue within the organisational context. In order to provide a further rationale for the specific areas focussed on in the current study, the conceptualisation for this study will be explained within the parameters of a specific paradigm of viewing organisations. Thus, the current study will be presented within the framework of a systemic approach to the understanding of organisational behaviour, of which trauma debriefing is an example. At the outset it is important to note that the aim of the present study is not to test this model of organisational behaviour. Instead, the model is proposed as means of structuring the conceptual issues to be explored in a meaningful manner.

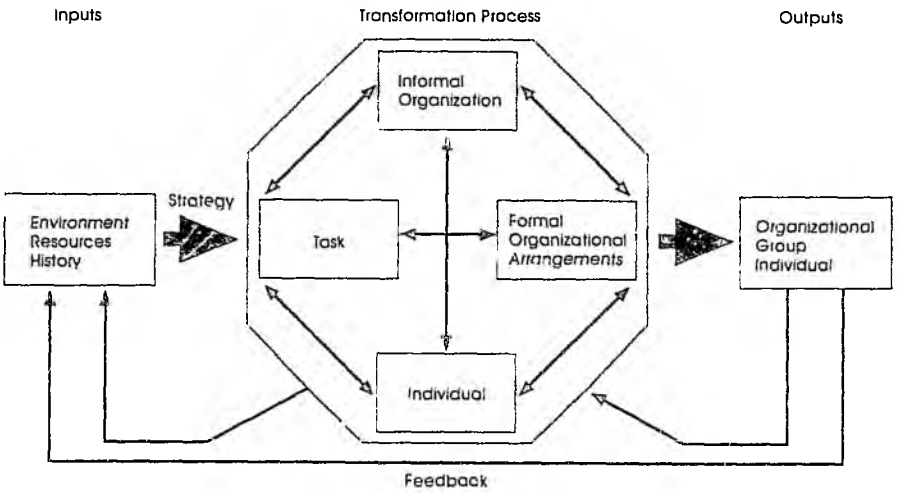
A congruence model of organisational behaviour

Born out of a direct endeavour to overcome the limitations inherent in classical management theory, the open systems approach to viewing organisations is founded on a

number of key principles (Morgan, 1997). The first principle is concerned with the concept of an open system. As such, organisations are viewed as living, dynamic systems existing in a continuous exchange with their environment whereby input is taken from the environment and subjected to various transformation processes which result in output (Nadler, 1979). The second key principle is related to the definition of organisations as comprising interrelated and interdependent sub-systems (Morgan, 1997). Hence, change in one system will result in changes in the other parts of the system. Linked to this characteristic, is the idea that organisations have the property of equilibrium whereby the system moves to a state of balance or congruence (Nadler & Tushman, 1981). The final principle on which this approach is based, is that organisations, as open systems, need to maintain favourable transactions of input and output with the environment in order to survive over time (Nadler, 1979).

In response to the criticism that systems theory is useful but too abstract a concept to be of any pragmatic worth, Nadler (1979) and Nadler and Tushman (1981) developed their Congruence Model of Organisational Behaviour which is graphically presented in Figure 10 Based on general systems theory this model identifies the major 'inputs' to the system of organisational behaviour as the environment which provides constraints, demands and opportunities; the resources available to the organisation; and the history of the organisation. Strategy is seen as the fourth input and is comprised of, "a set of key decisions about the match of the organization's resources to the opportunities, constraints and demands in the environment within the context of history" (Nadler, 1979, p.1). Accordingly, the 'outputs' of the system are the effectiveness of the organisation's performance and include group performance as well as individual behaviour and affect.

Figure 10. A congruence model of organisational behaviour (Nadler & Tushman, 1981)



The major focus in this model is the transformation process involving the four major components, namely, task; individuals; formal organisational arrangements; and informal organisational arrangements (Nadler & Tushman, 1981). 'Task' refers to the work to be done and its critical characteristics, 'individuals' is concerned with the nature of the people available to do the work; 'formal organisational arrangements' is concerned with the various structures, processes and systems designed to motivate and facilitate individuals in the performance of tasks; and lastly, 'informal organisational arrangements' refer to aspects such as values, patterns of communication and power which are neither planned nor written but which tend to emerge over time and characterise how an organisation actually functions.

The relationship among components is the basic dynamic of the model in that between each pair a relative degree of congruence or 'fit' can be identified. The key hypothesis of the model is that organisations will be most effective when their major components are congruent

with each other. The model recognises the fact that different patterns of organisation and management will be most appropriate in different situations and that individuals, tasks strategies, and environments may differ greatly from one organisation to another (Nadler, 1979; Morgan, 1997).

The present study viewed from a congruence model of organisational behaviour

The variables to be researched in the proposed study, their interaction and resulting outcomes can be conceptualised and explored usefully within the framework provided by Nadler and Tushman's model. Firstly, the specific inputs refer to the violent context in which banking organisations currently operate in South Africa, and the resources at the organisations' disposal to deal with these. Strategy refers to the intervention adopted to match the organisations' resources to the opportunities, constraints and demands in the environment within the context of history. More specifically, the interventions adopted by the three organisations would include the ongoing improvement of aspects related to primary security in banking halls; participation in community-based crime prevention strategies, for example, Business Against Crime and interventions aimed at assisting employees who have been involved in armed hold-ups in the course of their duties, for example, trauma management interventions.

The 'task' involves the actual job of debriefing employees who have experienced a bank robbery. Pertinent issues here are the nature of the robbery in terms of the incidence of deaths, serious injuries, and verbal abuse. The specific debriefing procedure followed by all debriefers involves a 4-phase one-on-one contact model: the first debriefing contact occurred on the day of the bank robbery while subsequent follow-up contacts were made the next day, a week later, and, finally, a month later (Friedman, 1997).

The 'formal organisational arrangements' include the trauma skills training courses and

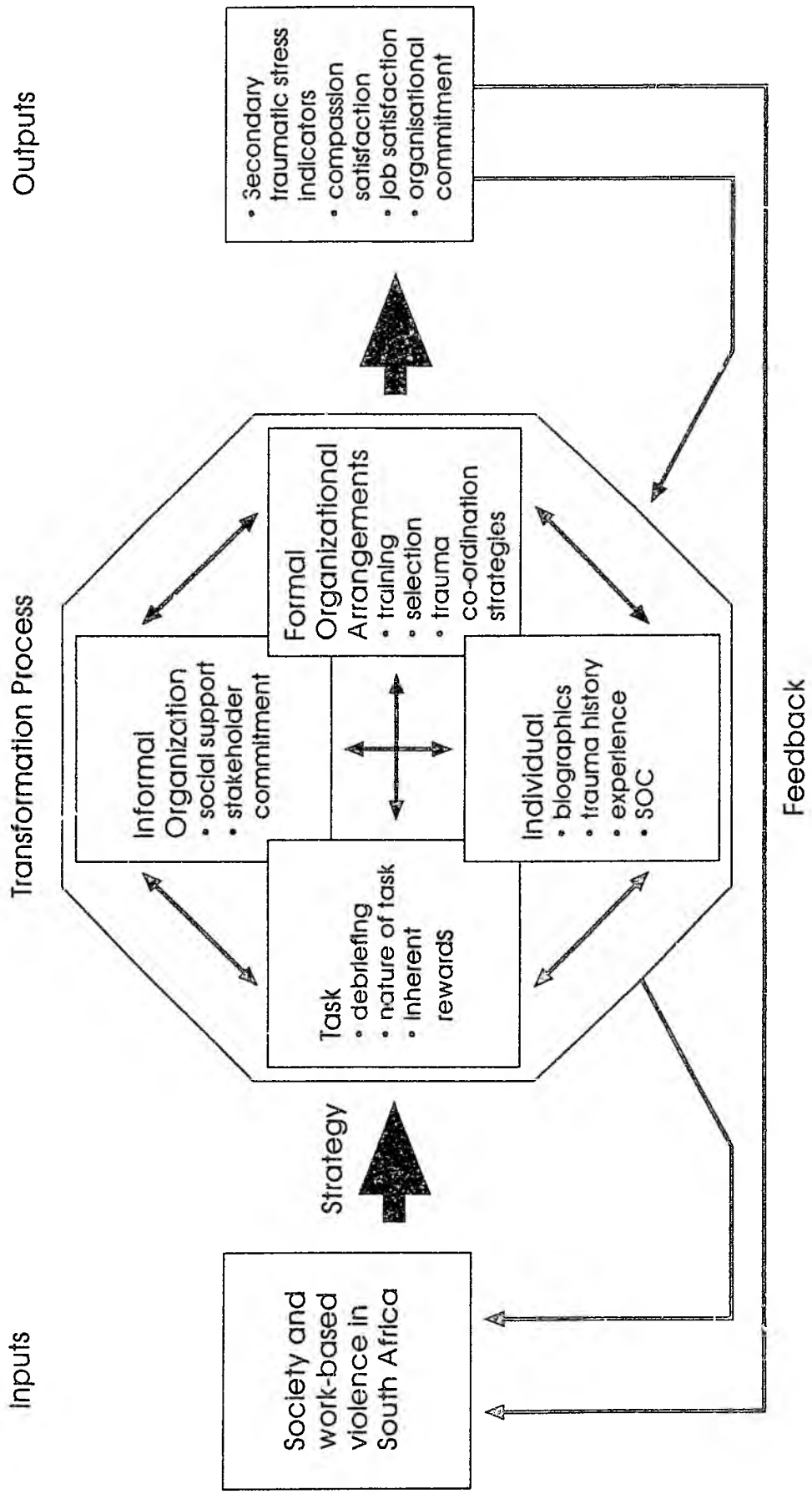
the programme's general co-ordination strategies. All debriefers in the current study had attended a 2-day training course on debriefing skills. The course was developed and run by Dr Merle Friedman. Debriefers are trained in an approach to trauma debriefing involving the following four components: Telling/re-telling the story; re-framing the guilt/self-blame; normalizing the symptoms; encouraging mastery. The theoretical underpinnings of this model can be best understood as representing an integration of psychodynamic and cognitive-behavioural principles (Eagle, 1998). Refresher courses are run on an ongoing basis. Trauma programme co-ordination strategies encompasses aspects such as debriefer selection; debriefer duty roster systems; communication and feedback systems; ongoing evaluation and monitoring of the trauma programme; and the co-ordination of the debriefing of the debriefers following an incident.

The 'informal organisational arrangements' include managerial and co-worker support and commitment (indicators of organisational culture) given to the trauma debriefers. Lastly, the 'individual factors' would include the debriefer's experience, age, gender, designation, Sense of Coherence, and other non-work related sources of social support. Within this conceptual framework, it is proposed that the congruence or incongruence between all of these components will have an influence on a number of outcomes at the individual, group, and organisational levels. Potential outcomes to be considered at the individual level are changes within debriefers' reported organisational commitment and job satisfaction, both of which are individual responses with considerable impact on the overall functioning of an organisation. Secondary traumatic stress as well as the positive consequences of trauma work (compassion satisfaction) would also be potential individual outcomes to be considered within this framework. The effectiveness of the trauma intervention programme may well be influenced by the outcomes experienced by the individual debriefers as the service being

offered is only as good as the individuals offering the service In addition, the individual outcomes may have an influence on the strategies adopted by the trauma programme co-ordinators for example selection strategies for future debriefers.

Therefore the congruence model presented earlier can be used to reflect the parameters of the current study as indicated in Figure 11 .

Figure 11. Congruence model of organisational behaviour: The present study



The following specific aims and research questions were formulated based on this conceptual framework.

Rationale and Aims

Based on the preceding literature review it can clearly be seen that the concept of secondary traumatic stress in trauma caregivers is an area rich in potential research topics. A unique sample of crisis caregivers forms the focus of this study. These non-professional trauma debriefers operate in an organisational setting. They voluntarily adopt the role of trauma debriefers together with their other work roles. Figley & Kleber (1995, p.87) confirm that, "the relationship between work and trauma has been an ignored subject in scientific research, as well as in clinical practice and organisational matters." This study therefore aims to address two under researched, but critically important topics, namely secondary traumatic stress as potentially experienced by trauma debriefers in the unique context of organisational settings.

As such, within the context of the secondary traumatic stress framework and a congruence model of organisational behaviour, the broad aim of this study is to explore non-professional trauma debriefers' experiences as related to their debriefing role and to consider the individual and organisational factors affecting and being affected by their adoption of this role.

In order to achieve this aim, the current researcher has adopted a three phase research design. The first phase involves the development of a scale to measure the organisational factors that may impact on the experiences of debriefers in organisational settings. Phase 2 forms the quantitative stage in the current research whereby a number of specific research questions are examined.

The specific research questions explored in Phase 2 of the current study are:

1. Do non-professional workplace trauma debriefers experience secondary traumatic stress?
2. What personal variables are related to the potential experience of secondary traumatic stress? Variables to be considered include biographical data, and exposure to previous work and non-work related trauma.
3. To what extent does the nature of the debriefing incident impact on the experience of secondary traumatic stress?
4. What organisational variables are related to the potential experience of secondary traumatic stress? Variables to be considered include intervention co-ordination strategies, training effectiveness, selection strategies, recognition received, commitment issues, role satisfaction, role conflict, and role ambiguity.
5. What role do social support and Sense of Coherence play in the relationship between experiences of workplace trauma debriefers and the indicators of secondary traumatic stress?
6. To what extent does the experience of being a workplace trauma debriefer impact on significant work attitudes such as job satisfaction and organisational commitment?
7. What role do social support and Sense of Coherence play in the relationship between the experiences of workplace trauma debriefers and job satisfaction and organisational commitment?

In order to further increase the understanding of the experiences of debriefers, a number of individual focussed interviews were then conducted and form the third, qualitative phase of this study.

The precise details of the methodology adopted in the three phases of this study, will now be outlined in the Methodology chapter.

CHAPTER SIX

Methodology

This chapter covers the research design adopted in the present study as well as details regarding the sample, instruments used, and statistical analyses adopted. In this particular chapter, information related to Phase 1 (instrument development) of this study will only briefly be referred to. The details regarding the particular steps followed in the process of developing the Workplace Trauma Debriefers Scale will be dealt with in a separate chapter so as to facilitate the conceptual integration of the procedure followed and the resulting outcome of this phase of the current study.

Research Design

A mode of methodological triangulation was adopted in this study. This involved the combination of quantitative and qualitative methodologies with the aim of capturing, "a more complete, holistic, and contextual portrayal of the units under study." (Jick, 1979, p.603). Similar to the idea of triangulation is that of methodological pluralism (Rosenthal & Rosnow, 1991) in which more than one approach to gathering data is seen as imperative given the limitations of any one particular strategy of inquiry. As such, in the present study both quantitative and qualitative data were collected.

In the quantitative part of the study, a non-experimental, cross-sectional design was adopted so as to explore the relationships between the various research variables. These relationships were explored in greater depth by utilising three comparative groups of subjects in an attempt to elicit the organisational differences being focussed on in the study. Given the nature of cross-sectional design, it is imperative to note at the outset that causality is not implied by any of the statistically significant relationships which emerged.

The qualitative section of the study involved focussed interviews undertaken after the

quantitative part of the study had been completed. This process was adopted so that trends emerging from the quantitative findings could be probed further within the spirit of methodological triangulation.

Sample and Procedure : Overview

The sample for both the quantitative and qualitative studies was made up of three sub-samples of non-professional workplace trauma debriefers drawn from three different financial institutions. Each of these three organisations had introduced the same trauma debriefing intervention (Friedman, 1997) but had tailored the procedures to their specific organisational needs and culture. Each subject, therefore, had received the same training, upgrading and supervision in trauma debriefing skills, and each had been involved in debriefing colleagues who had all been exposed to the same type of workplace traumatic incident, namely, a bank robbery.

The aims of the study were discussed with each of the trauma programme co-ordinators in the three organisations and permission to conduct the studies was thereby obtained. The programme co-ordinators provided the contact details of all the debriefers who had been involved in at least one recent debriefing incident. For the quantitative study (Phase 1 and Phase 2), personally addressed letters requesting their participation in the research project were sent to each debriefer (see Appendix B). In the covering letters the voluntary nature of the research was emphasised as was the fact that anonymity was guaranteed. Subjects were requested to complete the questionnaires and return them directly to the current researcher in the self addressed and stamped envelopes provided.

In Organisation 1, 155 questionnaires were sent out. Seventy-nine were returned indicating a 51% response rate for Organisation 1. One hundred and eleven questionnaires were sent out to debriefers in Organisation 2. A response rate of 43% was obtained as 48

questionnaires were returned. In Organisation 3 only 36 names were provided by the programme co-ordinator. This may be viewed as a reflection of the effects of the restructuring process being experienced in the Human Resources department. Nevertheless, 28 questionnaires were returned which resulted in a 78% response rate for Organisation 3. In total, 302 questionnaires were sent out and 155 returned indicating a response rate of 51% for the whole sample. In Organisation 1, 20 of the questionnaires returned could not be used as respondents had been trained but had not been involved in a debriefing incident. In Organisation 2, 4 questionnaires contained incomplete information, while in Organisation 3 only 1 questionnaire was unusable. The final sample consisted of 130 debriefers with 59 drawn from Organisation 1, 44 from Organisation 2 and 27 from Organisation 3.

Preliminary analysis (ANOVAs and Chi-squares) of the biographical data indicated that the three sub-samples did, at times, differ significantly on the biographical variables As a result, the specific details of the sample are presented in the first of the results chapters (Chapter 7) in such a way as to highlight the biographical data pertaining to each organisational sub-sample as well as the total group.

For the qualitative study (Phase 3) the trauma programme co-ordinators provided the present researcher with details pertaining to the duty roster of the trauma debriefers. The present researcher made personal contact with all debriefers who had been involved in a bank robbery debriefing 6 weeks previously. Permission was requested to interview these debriefers and, once again, it was emphasised that participation in the interviews was voluntary and that the results would be reported in the form of trends thereby ensuring anonymity. The final sample in the qualitative phase of the study consisted of 30 trauma debriefers - 10 from each of the three organisations.

Further details pertaining to the methodology adopted in the three research phases of

the present study will now be outlined.

Phase One: Development of the Workplace Trauma Debriefers Scale

The initial phase of this study involved the development and validation of a scale measuring the experiences of workplace trauma debriefers. This process was undertaken in accordance with the guidelines to scale construction proposed by Loewenthal (1996). As such, the steps followed included: a process involving item generation based on a qualitative pilot study; a pilot study to check face validity; item analysis; and confirmatory and exploratory factor analysis. The details regarding the specific process followed in this undertaking, including the confirmatory and exploratory factor analytic approaches adopted, are outlined in Chapter 7.

Phase Two: Quantitative study

Measuring Instruments

The scale resulting from Phase 1 of this study was used in conjunction with the following instruments so as to enable the current researcher to respond to the seven research questions outlined earlier. See Appendix B for the complete questionnaire incorporating all the measurement instruments for Phase 2 of the current study.

Biographical questionnaire. A biographical questionnaire was compiled to elicit information on the demographic data pertinent to the sample (see Appendix B). Information on personal details such as age, gender, and marital status was requested from respondents as well as that related to aspects of debriefing exposure in the relevant organisation.

Secondary Traumatic Stress. Secondary traumatic stress (STS) was measured by incorporating two measures, namely, the Compassion Satisfaction/Fatigue Self-Test for Practitioners (Stamm & Figley, 1997) and the Silencing Response Scale (Baranowsky,

personal communication, 4 April 1997; Baranowsky, 1998). Both of these scales are still in the refinement phase of their development but given the relative infancy of the stage of research into secondary traumatic stress, they represented the most suitable measurement options available. Both scales are designed with the express purpose of measuring the potential for experiencing secondary traumatic stress in trauma counsellors.

The 66-item Compassion Satisfaction/Fatigue Self-Test for Practitioners is a revised version of the original 40-item Compassion Fatigue Self-Test for Psychotherapists developed by Figley (1995a). The original version of the scale is based on the items incorporated in Horowitz et al.,'s Impact of Events Scale, a widely used measure of PTSD (Horowitz, Wilner, & Alvarez, 1979). The Compassion Fatigue Self Test for Psychotherapists is made up of two sub-scales, namely, burnout (17-items) and compassion fatigue (23-items). Subjects respond to probe statements on a 1 to 5 Likert type scale. Respondents' scores can be classified in a range from extremely high risk to extremely low risk, of experiencing burnout and compassion fatigue. Figley and Stamm (1996) reported alpha reliabilities ranging from .94 to .86 on the Compassion Fatigue Self Test (excluding the compassion satisfaction component). In order to acknowledge the potential positive effects of trauma counselling, Stamm (1997) revised this original scale so as to include 26 items related to the potential experience of compassion satisfaction (Stamm & Figley, 1997). In the present study, the Compassion Satisfaction/ Fatigue scale was found to have an overall internal reliability score of .91. The Cronbach alphas for the sub-scales in this study were .84; .83; and .85 for compassion fatigue, burnout and compassion satisfaction, respectively.

In consultation with B. H. Stamm (personal communication, September 17, 1997; September 20, 1997) the items in the Compassion Satisfaction/Fatigue scale were adapted in order to be of more explicit relevance to the trauma debriefers in the present study.

Specifically, reference was made to 'debriefers' rather than 'helpers'. For instance, the item "I like my work as a helper" (item 46) was adapted to, "I like my work as a debriefer". Similarly, items regarding clients were adapted to reflect the context of the current study's focus. As such, items such as, "Working with those I help bring me a great deal of satisfaction" (item 26) was adapted to, "Working with the people I debrief brings me a great deal of satisfaction".

Furthermore, the current author identified a number of inconsistencies in the temporal aspects of the items in the original scale as reflected in the grammatical tenses used in various items. This was brought to the attention of B. H. Stamm and in consultation with B. H. Stamm (personal communication, October 10, 1997), items were revised accordingly. For instance, "I have thought that I need more close friends" (item 23) was adapted to "I think that I need more close friends". These revisions have been included in a revised version of the Compassion/Fatigue Self-Test for Practitioners which has been released subsequent to the completion of the current study (Stamm, 1998). The revised version of the scale has now been named the Compassion/Fatigue Self-Test for Helpers. A number of minor adjustments are evident in this scale, for instance, the item "I have the tools that I need to do my work as a debriefer" (item 47) has been revised to, "I have the tools and resources that I need to do my work as a debriefer". In addition, this revised version of the scale includes norms for the interpretation of the Compassion Satisfaction sub-scale.

The original Silencing Response Scale (Baranowsky, personal communication, 4 April 1997) consists of 15 items measured on a 1 to 10 rating scale. The development of the silencing response construct and the subsequent scale to measure it, was directly influenced by Danieli's article entitled the "Conspiracy of Silence" (1985). This article deals with the phenomenon of people from all walks of life, including those involved in altruistic activities such as the Red Cross, looking the other way in the face of traumatic events such as those

inherent in the Holocaust. The Silencing Response Scale was developed to help care-givers identify specific communication difficulties in their trauma work involving the review of clients' traumatic memories. Accordingly, the silencing response manifests itself in the selective listening of clients' traumatic narratives as well as the active avoidance of clients' traumatic memories culminating in the shut down of the therapeutic process and impediment of communication. This in turn, prevents clients from resolving their traumatic life experiences through memory collection and investigation.

According to Baranowsky (1998) the silencing response is determined by the following care-giver assumptions:

1. I can't do anything about it. Listening won't help so I don't want to hear about it
2. If we touch on the traumatic event the person will fall apart or be destroyed.
3. I will be destroyed if I hear about the traumatic event.
4. Good things happen to good people therefore you must be bad for this to have happened to you.
5. This is too terrible to be true.
6. This violates my assumptive world regarding the safety of my neighbourhood.
7. A strong need on the care-giver's part to have the client "Just get over it".
8. If it happened to you it could happen to me

The items of the Silencing Response Scale reflect these assumptions and may be viewed as indicators of aspects of compassion fatigue as applied very specifically to the counselling context. However, in the present study it was found that the majority of subjects did not complete item 11 ("Do you consistently support certain clients in avoiding important therapeutic material when time is not a constraint?"). It would seem that this item was not

understood by the subjects in the present study and this may be seen as a reflection on the non-professional status of the subjects in this study. As a result, item 11 was excluded from the overall scores of the Silencing Response Scale in the present study. A Cronbach alpha of .85 was found in the present study indicating acceptable internal reliability of the Silencing Response Scale.

Exposure to previous trauma. In order to determine whether subjects had been exposed previously to a potentially traumatic event other than that of trauma debriefing in the workplace, an adapted version of the Traumatic Stress Schedule (Norris, 1990) was used in this study. The original instrument developed by Norris was designed to be used in personal screening interviews. Esprey (1996) revised this slightly so as to be able to use it in a survey research project in the South African context. This 7-item scale measures the occurrence of a cross section of widely agreed on traumatic life events, for example, loss of a loved one through accident, homicide, or suicide. In the present study, this instrument was used to determine whether people had been exposed to potentially traumatic events in situations other than trauma debriefing. Due to the fact that it is a life events scale, no indicators of internal consistency are available (Monroe, 1982).

Social Support. Social support was measured by using the Crisis Support Questionnaire developed by Joseph, Andrews, Williams and Yule (1992). This scale determines respondents' perceptions of emotional and instrumental support available to them after exposure to a potentially traumatic event. In the present study, this event referred to a trauma debriefing incident. This scale has yielded satisfactory psychometric properties in other studies as measures of internal consistency ranged from .69 to .79 (Joseph et al., 1992; Esprey, 1996) In a South African study Esprey (1996) included questions pertaining to the source of support. This approach was adopted in the present study and was extended to

incorporate the trauma programme support system, as well as managers and colleagues. In the present study a Cronbach alpha of .85 was found for the Crisis Support Questionnaire.

Sense of Coherence. Antonovsky's 29-item Orientation to Life Questionnaire (1987) was used to measure the construct of a sense of coherence. The Orientation to Life Questionnaire (OLQ) incorporates three sub-scales related to the constructs of manageability, meaningfulness, and comprehensibility. The psychometric properties of this scale are strong with Cronbach alpha measures of internal consistency ranging from .74 to .91 in international and South African studies (Antonovsky, 1993; Pitman, 1996). In the present study, a similar satisfactory indication of internal consistency was found (Cronbach alpha = .92).

Empirical support for reliability and criterion validity for the OLQ was reported by Flannery, Perry, Penk, and Flannery (1994). These authors found significant negative correlations with psychometrically sound measures of anxiety and depression. Moreover, Sense of Coherence was associated more strongly with anxiety and depression than locus of control and social support were found to do.

Job Satisfaction. Warr, Cook and Wall's (1979) Overall Job Satisfaction scale was used to measure aspects of intrinsic and extrinsic job satisfaction in the present study. This scale consists of 15 items and is scored on a 5-point Likert scale. It has been used in many South African studies and has consistently been found to have satisfactory measures of internal reliability ranging from .85 to .90 (Bluen, Barling, Burns, 1990; Lock & Ortlepp, 1997). This trend was confirmed in the present study as a Cronbach alpha of .90 was found for the Overall Job Satisfaction scale.

Organisational Commitment. Commitment to the organisation was assessed by using the 15-item Organisational Commitment Questionnaire developed by Mowday, Steers and Porter (1979). This scale aims to assess the relative strength of an individual's identification

with and involvement in a particular organisation. As in the case of the Overall Job Satisfaction scale, the Organisational Commitment Questionnaire has been widely used in the South African context and has been found consistently to yield Cronbach alphas ranging from .82 to .93 (Mowday et al., 1979; Lock & Ortlepp, 1997; Allen & Ortlepp, 1998). This trend was confirmed in the present study as a Cronbach alpha of .92 was found.

Statistical analysis

Data obtained from the measuring instruments in the quantitative study was analysed statistically in an attempt to answer the 7 research questions outlined earlier. The specific statistical procedures utilised involved a combination of Pearson product-moment correlations; analysis of variance (ANOVA); multiple regression analyses; and moderated multiple regressions.

Pearson product-moment correlations. Pearson product-moment correlations were used to determine the relationship between continuous variables in research questions 1, 4, 5, 6, and 7. Correlation coefficients summarise the relationship between two variables thereby indicating the degree to which variation in one variable is related to variation in another (Kerlinger, 1986). Authors caution that it is imperative to acknowledge that a positive correlation between variables is an indication of association and should at no time be seen as implying causality (Howell, 1992; Kerlinger, 1986).

Analysis of variance. ANOVAs were used to explore the issues outlined in research questions 2 and 3, namely, the consideration of the impact of categorical variables on the experience of secondary traumatic stress. According to Howell (1992), ANOVAs deal with differences between or among sample means with no restriction on the number of means being investigated. In the appropriate circumstances Howell states that ANOVAs allow for the consideration of two or more independent variables simultaneously which then determines the

individual effects of two or more variables.

Multiple regression: Stepwise application. Following the calculation of correlation coefficients between continuous variables as per research questions 1, 4, 5, 6, and 7, multiple regression analyses were used to further explore the relative impact of these variables on one another. In this way, for instance, it could be determined to what extent the variance in compassion fatigue could be used to predict the variance in job satisfaction scores (Howell, 1992). Multiple regression explores the collective and separate contributions of two or more independent variables to the variation of the dependent variable (Rosenthal & Rosnow, 1991). As such, multiple regressions analyse which of several independent variables are important and which are not in the description or prediction of a dependent variable (Howell, 1992). However, as in the case of correlation coefficients, it is essential to acknowledge that a strong relationship emerging from a multiple regression, does not imply or prove causality (Kerlinger, 1986).

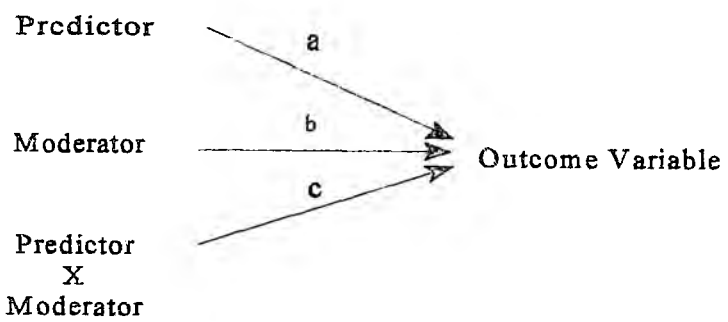
The assumptions of linearity, independence of residuals, equal variation, and normality govern the use of multiple regression (Pedhazur, 1987). These are discussed in further detail in the discussion on moderated multiple regressions.

In order to determine the impact on the indicators of secondary traumatic stress of the different aspects of the experiences of workplace trauma debriefers, stepwise regressions were used in this study. Stepwise regressions are an application of multiple regression analysis and permit reexamination at every step of variables incorporated in a regression model in various steps (Rosentahl & Rosnow, 1991). This is due to the fact that a variable entered at an early stage, may at a later stage, be rendered superfluous as a result of its interaction with other variables subsequently included in the model. A partial F-test for each variable presently in the model is run at each step so as to determine whether the addition of any given independent

variable to the model significantly improves the prediction of the dependent variable, given that other variables are already in the model. Should a variable have the smallest nonsignificant partial F statistic, it is removed and the model is refitted with the remaining variables. Rosenthal and Rosnow state that when no more variables can be entered or removed then the process is completed.

Moderated multiple regression. Research questions 5 and 7 focus on the moderating role of social support and sense of coherence. Baron and Kenny (1986) define a moderator as "a qualitative or quantitative variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable." (p.174). Figure 12 depicts the concept of a moderator diagrammatically.

Figure 12. Model of a moderator effect (Baron & Kenny, 1986)



In Figure 12 three causal paths can be identified namely, paths a, b, and c. According to Baron and Kenny (1986), the moderator hypothesis is supported if the interaction between the predictor and the moderator (Path c) is significant. In addition to this, Baron and Kenny indicate that the moderator should ideally be uncorrelated with both the predictor and the outcome variable to provide a clearly interpretable interaction term; and moderator variables always function as independent variables.

In the present study both the moderating variables (Sense of Coherence and social support) and the independent variables are continuous. As such, Baron and Kenny (1986) recommend that in this case, if one presumes that the effect of the independent variable (X) on the dependent variable (Y) varies linearly or quadratically with respect to the moderator (Z) then the following product variable approach should be used. Accordingly, Y is regressed on X, Z, and XZ. Moderator effects are indicated by the significant effect of XZ while X and Z are controlled.

A number of assumptions underlie the use of multiple regression as a statistical technique, namely, multicollinearity, linearity, normality, homoscedascity, measurement error and the error term (Pedhazur, 1982).

Multicollinearity exists when there are unacceptably high degrees of association between two or more independent variables in a regression equation. This is an unsatisfactory situation as if two independent variables share a high percentage of variance, then the effect of either variable cannot be isolated as being related to the dependent variable (Walsh, 1990). One proposed method of diagnosing the presence of multicollinearity, is to examine the Pearson correlation coefficients between the independent variables and a correlation of .80 or more can be considered as indicating multicollinearity.

Linearity implies that the relationships between variables are linear (Walsh, 1990). Linearity can be determined by the visual inspection of the residual plots computed on the predictor and dependent variables (Pedhazur, 1982).

Normality refers to the shape of the distribution of data points for each variable which should not be skewed or tailed for this assumption to be met. The test of normality is central to multiple regressions largely because the mean of the sample, intercept and slope parameters of the regression line should follow a normal distribution (Lewis-Beck, 1980).

Homoscedasticity is related to the assumption of normality in that the variability of scores on one variable is roughly the same at all values of the other variable (Lewis-Beck, 1980). When heteroscedasticity is present, the relationship between the variables may be lawful, but it is not captured completely by the correlation coefficient (Cohen & Cohen, 1983).

Measurement error refers to the reliability of the measured variables (Walsh, 1990). This assumption can be met by ensuring that reliable and valid measuring instruments are used (Pedhazur, 1982). Cronbach alpha coefficients can be calculated to determine internal reliability of a scale and an alpha of .60 or above may be considered satisfactory (Anastasi, 1988).

Error term allows for the fact that there is variability in a sample. In order to test this assumption residual plots are needed. A residual can be seen as the deviation between the predicted value and the actual value of the data, where it represents the variability not explained by the regression model (Howell, 1992).

Phase Three : Qualitative study

Procedure

In order to investigate the findings to have emerged from the quantitative study further, focussed interviews were conducted with 30 debriefers (10 from each of the three organisations). Dane (1990) defines focussed interviews as a partially structured interview in which " the interviewer poses a few predetermined questions but has considerable flexibility concerning follow-up questions." (p.129). According to Dane, focussed interviews are typically used when respondents consist of a specific group chosen for their familiarity with the research topic and the primary emphasis is to gain information about the subjective perceptions of these respondents.

The focussed interviews in the present study were conducted 6 weeks after a debriefer

had been involved in a debriefing incident. The interviews were conducted personally by the present researcher at the work location of each debriefer. As in the quantitative study of the present research, participation in this phase of the study was also voluntary. Furthermore, at the outset of each interview, the debriefer was assured of anonymity in the reporting of the findings.

Interview format

A standardised interview format was adopted in the present study (see Appendix C). As such, each debriefer was asked the same open-ended questions which aimed to complement the data gathered in the quantitative phase of this study. Questions were structured around the following key areas of interest:

1. Nature of the debriefing incident
2. Factors facilitating and hindering the effectiveness of the debriefing process
3. Perceived effectiveness of the debriefer's abilities
4. Management response to the debriefer being called "out"
5. Perceived effectiveness of the trauma intervention co-ordination strategies
6. Impact of the debriefing experience on the debriefer's work responsibilities
7. Impact of the debriefing experience on the debriefer's home life
8. Impact of the debriefing experience on the debriefer's personal values
9. Impact of the debriefing experience on the debriefer's attitudes towards the organisation
10. Coping strategies
11. Commitment to continue debriefing

The information gathered from the opened ended questions around these themes was then analysed by means of content analysis.

Data analysis

The most common method of interpreting information obtained through qualitative research techniques, is content analysis. Krippendorff (1980) describes content analysis as a method of information processing which is a technique for making inferences by objectively and systematically identifying specified characteristics of the message. In accordance with the recommendations made by Taylor and Bogdan (1984), the following steps were adhered to in the content analysis of the interview data in the present study.

1. The data was read and reread so as to facilitate an in-depth understanding of the information gathered.
2. Interpretations and ideas were noted as the data was read and were incorporated with the memos made during and following the interviews.
3. Throughout the data analysis, emerging themes were sought and noted.
4. Classification schemes were constructed in line with the responses given.
5. In order to provide a general frame of reference, theoretical propositions and concepts were developed.
6. An intensive analysis of the data was performed in line with the relevant literature and theoretical frameworks reviewed.
7. Frequency tables were constructed so as to facilitate the interpretation of the most pertinent themes to have emerged during the analysis.

From these steps, the main aim of content analysis was achieved namely, to take the verbal, non-quantitative material and to transform them into quantitative data (Kerlinger, 1986).One of the strongest criticisms against content analysis is that it is subjective and inherently impressionistic (Bryman, 1988). One way of counteracting this limitation of content analysis is to use more than one researcher in analysing the data, and then comparing

the results so as to identify any differences in the significant themes (Sommer & Sommer, 1980). This strategy was adopted in the present study. As such, a sample of the interview data was content analysed by one other independent person with demonstrated expertise in the field of psychological research. No significant discrepancies in the categorisation were found. The findings from the three phases of the current study will now be outlined.

CHAPTER SEVEN

Results : Phase One - Instrument Development

Sample demographics : Phase One and Phase Two

As previously stated, preliminary analysis (ANOVAs and Chi- squares) of the biographical data indicated that the three debriefer sub-samples did, at times, differ significantly on the biographical variables. As a result, the specific details of the sample are presented hereunder in such a way as to highlight the biographical data pertaining to each organisational sub-sample as well as the total group.

Table 1

Gender breakdown of sub-samples

	Total sample	Organisation 1	Organisation 2	Organisation
Males	54	20	18	16
Females	75	39	26	11

Table 2

Breakdown of sub-samples by marital status

	Total sample (N=130)	Organisation 1 (n=59)	Organisation 2 (n=44)	Organisation 3 (n=27)
Married	99	45	32	22
Single	9	3	5	1
Divorced	12	7	3	2
Steady relationship	7	2	3	2
Widowed	3	2	1	-

Table 3

Breakdown of sub-samples by home language

	Total sample (N=130)	Organisation 1 (n=59)	Organisation 2 (n=44)	Organisation 3 (n=27)
English	79	44	12	23
Afrikaans	48	14	31	3
Zulu	1	-	-	1
Sotho	1	-	-	-
Other	1	1	-	-

Table 4

Breakdown of sub-samples by highest education level acquired

	Total sample (N=130)	Organisation 1 (n=59)	Organisation 2 (n=44)	Organisation 3 (n=27)
Matric	43	25	8	10
Post Matric diploma	26	15	5	6
Bachelor's degree	23	9	10	4
Post graduate degree/diploma	38	10	21	7

Table 5

Breakdown of sub-samples by job level

	Total sample (N=130)	Organisation 1 (n=59)	Organisation 2 (n=44)	Organisation 3 (n=27)
Senior management	13	9	1	3
Middle management	70	32	26	12
Junior management	29	12	8	9
Supervisory	11	3	5	3
Clerical	7	3	4	-

Table 6

Descriptive statistics of continuous demographic variables for the total sample and the three organisational sub-samples

	Mean	Minimum	Maximum	*SD*
Total sample				
Age (years)	38.98	23.42	56.42	8.19
Number of children	1.42	0	4	0.96
Length of service (years)	13.08	0.75	34.83	8.36
Organisation 1	41.01	26.5	56.42	8.22
Age (years)				
Number of children	1 59	0	4	0.87
Length of service (years)	13.46	1.42	34.83	7.74
Organisation 2				
Age (years)	36.32	23.42	56	7.43
Number of children	1.21	0	3	1.03
Length of service (years)	10	0.75	34.83	7.14
Organisation 3				
Age (years)	38.93	23.5	49.92	8.33
Number of children	1.41	0	3	1.01
Length of service (years)	16.68	1.5	30	10.14

Descriptive statistics pertaining to the subjects' debriefing experience were gathered and are presented in Table 7. 'Debriefing Length' refers to the length of time a person had been in a debriefing role in that particular organisation; 'Total Debriefings' refers to the total number of people a person had debriefed; and 'Last Debriefing' refers to the time lapse since a person was last involved in a debriefing incident.

Table 7

Debriefing details for the total sample and the three organisational sub-samples

	Mean	Minimum	Maximum	*SD*
Total sample				
Debriefing length (years)	2.88	0.17	10.42	2.04
Total debriefings	28.41	0	300	38.36
Last debriefing (months)	5.2	1	36	6.07
Organisation 1				
Debriefing length (years)	2.98	0.17	10.42	1.86
Total debriefings	23.79	0	100	23.77
Last debriefing (months)	6.46	1	24	6.57
Organisation 2				
Debriefing length (years)	2.32	0.17	6	1.45
Total debriefings	24.36	0	150	28.07
Last debriefing (months)	4.55	1	36	6.18
Organisation 3				
Debriefing length (years)	3.59	0.5	10 25	2.88
Total debriefings	44.74	0	300	65.68
Last debriefing (months)	3.62	1	18	4.07

Development of the Workplace Trauma Debriefers Scale

The initial phase of this study involved the development and validation of a scale measuring the experiences of workplace trauma debriefers. In accordance with the guidelines to scale construction proposed by Loewenthal (1996), the following steps were undertaken in this evolutionary process :

Step 1 : Item generation - exploratory qualitative study

An exploratory qualitative study was undertaken under the supervision of the current researcher. This exploratory study (Marinus, 1996) involved focussed interviews with 20 workplace trauma debriefers in a banking institution. Although the interviews were semi-structured, they were relatively broad in their focus so as to elicit information on varying issues related to the experience of being a non-professional trauma debriefer in the workplace. The data from this study was analysed using thematic content analysis. The particular themes to emerge from this pilot study incorporated responses related to debriefers' selection and training, job satisfaction, job enrichment, organisational commitment, role stress, and coping strategies.

The data from this pilot study then formed the basis for the composition of the original 51-item Workplace Trauma Debriefers' Scale (WTDS) developed in the current research. The particular issues raised under the themes identified by Marinus (1996) were used by the present author to direct the compilation of a pool of potentially relevant and useful items to be included in the WTDS. As such, items related to the following themes were developed and included in the WTDS: Debriefer training, debriefer selection, debriefer role satisfaction, debriefer role conflict, trauma programme co-ordination strategies, and commitment of key stakeholders to the trauma programme.

Step 2 :Pilot study

A pilot study utilising the original WTDS was then undertaken by the current researcher. This involved the identification of 10 non-professional trauma debriefers who had undergone the same training as that of the subjects in the original study, but were operating in an organisation that was similar to, but not the same as the three financial organisations forming the focus in the main study. Participation was voluntary. These 10 workplace trauma

debriefers were required to complete an early version of the WTDS in their own time according to set instructions (see Appendix D). Following this, the current researcher facilitated two focussed groups each with 5 participants. In these focussed groups, participants were encouraged to discuss any difficulties they had encountered with the scale as well as any suggestions for improvement. The current researcher then refined the WTDS with these suggestions and recommendations in mind.

For instance, an item regarding debriefer selection was found by this group of debriefers to be ambiguous and was therefore changed from, "I was selected appropriately for the role as a trauma debriefer.", to "I am happy with the way in which I was selected as a trauma debriefer." Debriefers in the pilot study felt that it was unrealistic for any training course to include all the essential skills and therefore recommended that the item, "The trauma debriefing training course did not equip me with all the necessary skills to facilitate the debriefing session." be adapted to "The trauma debriefing training course did not equip me with the essential skills necessary to facilitate the debriefing sessions." This group of debriefers also consistently identified the item, "Management in this organisation is committed to the trauma debriefing programme.", as being too broad and recommended that specific reference rather be made to the commitment of senior management, the debriefers' manager, and the managers of the employees requiring debriefing, in separate items. The original WTDS was therefore revised in accordance with these recommendations from the pilot group of debriefers.

Step 3 : Expert content validity check

In a further attempt to check the content validity of the WTDS, the scale was given to a number of experts in the fields of both trauma counselling and organisational behaviour. As such comments and recommendations regarding the WTDS were gathered from : Four trauma

programme co-ordinators; 3 professional trauma counsellors; and 3 professionals in the field of organisational behaviour with established expertise in the area of scale development. Few suggested changes were recommended but where they were identified , the WTDS was revised accordingly. For instance, it was recommended that an item be included to measure the global self-evaluation of a debriefers' effectiveness. As such, the WTDS was revised to include the item, "All in all, I feel that I am a successful and effective debriefer."

The original WTDS was therefore refined to its final form consisting of 59 items which elicited responses to issues related to seven core areas as identified in Step 1 and further refined in Steps 2 and 3 of the scale development process. The items were therefore grouped under the following seven categories : Trauma intervention co-ordination strategies (IntMgt), training effectiveness (Training), selection strategies (Selection), recognition received (Recognition), commitment issues (Commitment) , role satisfaction (Satisfaction), and role conflict (Conflict)

The seven categories of the WTDS were made up of the following items :

Table 8

Workplace Trauma Debriefers Scale : Seven components

	Intervention Management
10	The trauma debriefing programme is not being effectively co-ordinated in this organisation
22	The trauma debriefing programme is being effectively monitored/reviewed in this organisation
32	I am not given adequate physical resources (eg., rooms) to be effective in my role as a trauma debriefer
35	I have adequate access to a debriefer after debriefing in an incident
45	I am satisfied with the debriefing I receive after being involved in a debriefing

(table continues)

	Training
9	The trauma debriefing training course did not equip me with the essential skills necessary to facilitate the debriefing sessions
21	The trauma debriefing training course equipped me to deal with my own emotional responses to the debriefing sessions
30	The trauma debriefing training course equipped me to deal with people who were emotionally distressed by the traumatic incident
34	The trauma debriefing training course did not equip me to deal with people who were resistant to participating in the debriefing process
44	The trauma debriefing training course equipped me to deal with people who have experienced multiple traumatic incidents (eg., numerous bank robberies)
50	I have acquired new skills and knowledge as a result of my involvement in trauma debriefing

	Selection
1	I am happy with the way in which I was selected as a trauma debriefer
8	I do not know why I was selected as a debriefer
20	It was explained to me clearly why I was selected as a trauma debriefer
28	I think other factors should be taken into consideration before selecting trauma debriefers
33	I possess the right qualities for a trauma debriefer
43	The requirements of trauma debriefing are within my capabilities

	Recognition
2	My manager is committed to the trauma debriefing programme
12	My contributions to the trauma debriefing programme are appreciated and acknowledged by my manager
13	My contributions to the trauma debriefing programme are appreciated and acknowledged by my colleagues
14	My contributions to the trauma debriefing programme are appreciated and acknowledged by the employees involved in the traumatic incidents

(table continues)

15	My contributions to the trauma debriefing programme are appreciated and acknowledged by the manager of employees involved in the traumatic incidents
16	My contributions to the trauma debriefing programme are appreciated and acknowledged by the trauma debriefing programme co-ordinator
23	I do not feel adequately compensated by the organisation for my contributions to the trauma debriefing programme
36	My contributions as a trauma debriefer are not appreciated in this organisation
46	I recognise the value of my work as a trauma debriefer

Commitment	
2	My manager is committed to the trauma debriefing programme
5	I am committed to the trauma debriefing programme
17	My manager gives me adequate support to carry out my role as a debriefer
24	My opinion of this organisation has been negatively affected by my involvement in the trauma debriefing programme
27	The managers of employees involved in traumatic incidents are committed to the trauma debriefing programme
37	Senior management in this organisation is committed to the trauma debriefing programme
41	The managers of employees involved in traumatic incidents give me adequate support to carry out my role as a debriefer
47	The traun programme co-ordinator is committed to the trauma debriefing programme
51	My involvement in the trauma debriefing programme has increased my commitment to this organisation
52	My involvement in the trauma debriefing programme has increasedthe contribution I make to this organisation
57	My level of commitment to debriefing has decreased since I began working on the trauma debriefer programme

(table continues)

	Satisfaction
4	I do not find my role as a trauma debriefer personally rewarding
7	My experience as a debriefer has enhanced my interpersonal skills in other situations
19	I regret becoming involved in the trauma debriefing programme
26	The restructuring in this organisation has had a negative impact on my role as a debriefer
31	I have experienced personal growth as a result of my involvement in the trauma debriefing programme
39	I find it personally satisfying to be able to help others who have experienced a traumatic incident
42	My experience as a debriefer has enhanced my coping strategies in other situations
49	In my role as a debriefer, I feel that I make a contribution to dealing with the difficulties facing South Africa
56	My expectations of trauma debriefing have been met
59	All in all, I feel that I am a successful and effective debriefer

	Conflict
3	My normal workload has been negatively affected by my trauma debriefing responsibilities
6	There are clear policies and guidelines to assist me in my role as a trauma debriefer
18	I am able to make myself available to meet the time commitments involved in debriefing
25	My job status (job level) has a negative impact on my role in a debriefing session
29	I feel guilty when I am unable to respond to a debriefing request
38	My usual workload has been increased as a result of my trauma debriefing role
40	When dealing with a debriefing, I have adequate authority to perform my debriefing function effectively
48	I know what my responsibilities are in the debriefing situation
52	I am uncertain about my role in a debriefing session
54	I feel guilty when I have to request time off from my manager when responding to a debriefing request
55	I find myself getting emotionally involved when debriefing
58	I have difficulty functioning in my job after being involved in a debriefing

Step 4 : Psychometric analysis

The data arising from the WTDS in the main study (N = 130) was then subjected to psychometric scrutiny. The psychometric analysis of the WTDS was therefore undertaken on the data provided by the 130 trauma debriefers in the quantitative (Phase 2) part of the current study.

Internal consistency. The initial psychometric evaluation undertaken was to determine the internal consistency of the WTDS and its sub-scales by means of computing Cronbach alphas. Cronbach alpha is defined as "the estimated correlation of the test with any other test of the same length and with similar items." (Loewenthal, 1996, p.10). Anastasi (1988) describes internal consistency as a means of test homogeneity with a high internal consistency coefficient (Cronbach alpha) indicating that the items of a test measure a single construct or trait. Table 9 highlights the Cronbach alphas for the WTDS and its sub-components as well as their means and standard deviations.

Table 9

Cronbach alphas and descriptive statistics for the WTDS and its sub-components

	Cronbach alpha	Mean	*SD*
WTDS Total	0.92	234.11	24.71
Selection	0.67	23.76	3.39
Training	0.72	25.20	3.67
Intervention Management	0.69	17.49	4.55
Recognition	0.79	35.37	6.13
Commitment	0.71	46.21	5.52
Conflict	0.66	45.12	5.99
Satisfaction	0.61	40.95	3.61

From Table 9, it can be seen that the WTDS in total yielded a high Cronbach alpha,

while its sub-components revealed moderate indicators of internal reliability. According to Loewenthal (1996), Cronbach alphas of at least .70 are required in order for a scale or sub-scale to be considered satisfactory. The Cronbach alphas of four out of the seven sub-components of the WTDS fall below this suggested level, and therefore provide an early indication of the potential need for considerable revision of the original WTDS.

Item analysis. As recommended by Loewenthal (1996), one of the first steps undertaken in the psychometric validation process of the WTDS was an item analysis. Utilising Pearson product-moment correlations, a correlation matrix of all 59 items was generated in order to determine whether any items evidenced excessively high relationships ($r > .80$) with each other. In this way, the unnecessary duplication of items would have been indicated (Lewis-Beck, 1980). On inspection of the inter-item correlation matrix, a number of items were found to have a correlation coefficient of between .60 and .65. However, no two items were found to be more strongly correlated than this and hence there was no evidence of item redundancy due to excessively high inter-item relationships (see Appendix E).

Following this step, items were then examined in terms of the distribution of scores across the five-point, Likert-type response format so as to determine whether any items have a high percentage of scores in any single response category. In accordance with the procedure adhered to by Nunns (1995), this step was undertaken so as to ensure that item responses were not unduly skewed thereby lacking discriminability and items with more than 80 percent of item responses in any one response category were accordingly identified. Items 5. 19, and 39 were found to have a response rate of over 80 percent in a response category and were therefore identified as items to be potentially deleted. Item-total correlations for each item were then computed. This included the effect on t alpha coefficient for the total scale should the item be removed from the matrix. On inspection of the resulting data, it was

concluded that neither the deletion of items 5, 19, and 39 nor any other one item would increase the existing Cronbach alpha for the scale to a statistically meaningful degree (see Appendix F).

Following these initial steps it was decided to investigate the construct validity of the WTDS utilising confirmatory factor analysis methodology.

Step 5 : Factor analysis of the WTDS

Given that the WTDS was developed with the aim of eliciting information relevant to seven key aspects of the experiences of non-professional trauma debriefers in the workplace, a combination of exploratory and confirmatory factor analysis was adopted in this study. The most important aim of factor analysis is to represent the set of variables in terms of a smaller amount of hypothetical constructs so as to obtain the simplest mathematical solution for the data set (Anastasi, 1988). Depending on the objectives of the researcher, Kim and Mueller (1986) state that factor analysis can be used in an exploratory or confirmatory manner. The former refers to the situation when a researcher has no theoretical reason to assume a fixed number of underlying factors or constructs for a particular data set. The latter is utilised when there are a priori reasons to expect a particular number of dimensions and that certain items should belong to one or other dimensions. Kerlinger (1986) notes that researchers may adopt a combination of both approaches especially in the context of an evolutionary approach to the development of a measuring instrument.

Confirmatory factor analysis: LISREL 8. In order to determine whether the seven separate sub-components of the WTDS factors could indeed be obtained, a confirmatory factor analytic approach was adopted using LISREL 8 (Jöreskog & Sörbom, 1993). Structural equation modeling, of which LISREL is one approach, is a statistical methodology that takes a confirmatory approach to the multivariate analysis of a structural theory related to

some phenomenon (Byrne, 1994). According to Jöreskog and Sörbom (1993), confirmatory factor analysis entails a researcher taking an existing model or constructing a model that is assumed to describe, account for or explain empirical data using relatively few theoretical constructs. As such, a priori information about the latent structure which may be related to a specified theory, hypothesis or classificatory design for items, forms the basis of the model. The hypothesised model is statistically tested in a simultaneous analysis of the entire system of variables to determine the extent to which it is consistent with the data (Byrne, 1994). The model supports the hypothesised relations among variables, if goodness of fit is adequate; while the tenability of such relations, and hence the hypothesised model, is rejected if the goodness of fit is inadequate (Byrne, 1994; Jöreskog & Sörbom, 1993).

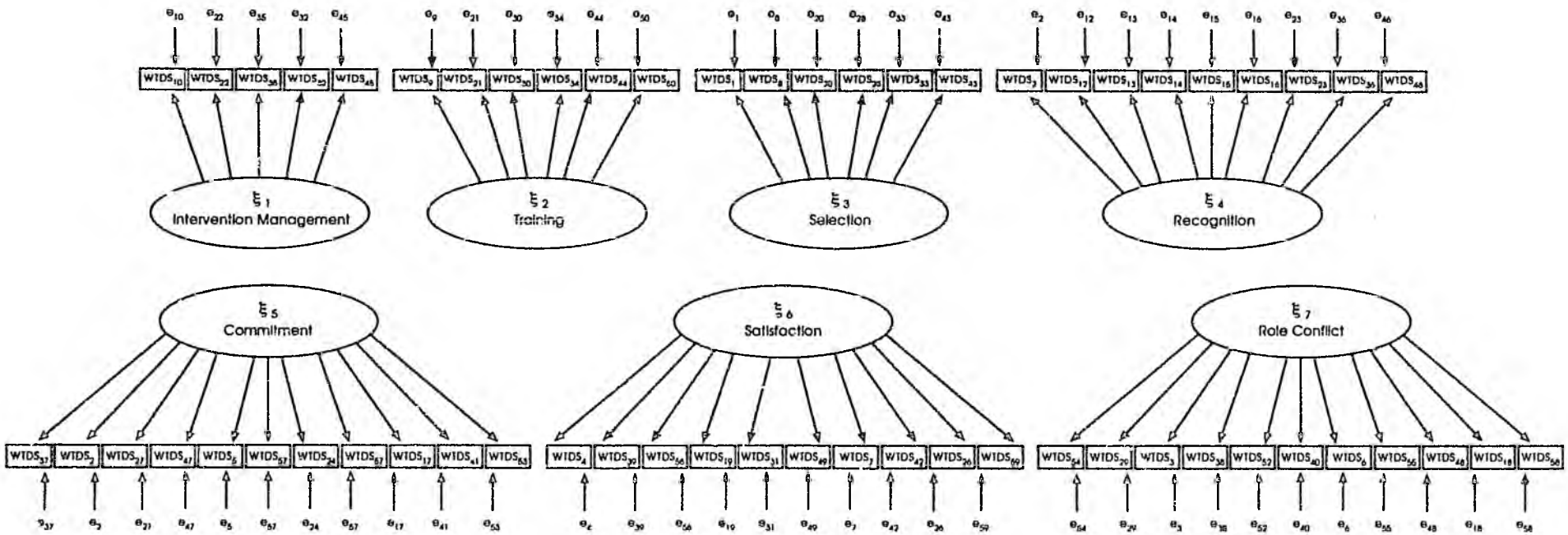
Jöreskog and Sörbom originally developed LISREL (Linear Structural Relationships) as a statistical computer programme to analyse covariance structure models (1993). Accordingly, LISREL is based on a generic model which assumes the existence of two different psychological variables, namely, observed variables and latent variables. Latent variables refer to those representing theoretical constructs that cannot be observed directly and are instead presumed to underlie particular observed variables; while observed variables serve as a direct measurement of a particular variable as well as an indirect indicator of an unobserved variable (Byrne, 1994). The aim of LISREL is, therefore, to evaluate the true relationships between latent variables on the basis of observed variables (Jöreskog & Sörbom, 1993: Loehlin, 1987).

The general LISREL model involves two steps incorporating, firstly, the measurement model step, and, secondly, the structural model step (Jöreskog & Sörbom, 1993). According to these authors, the measurement model describes how well the observed indicators function as measures of the latent variables. On the other hand, the structural equation model involves

testing theoretical relationships between latent variables. The focus of the present study is on the former and further attention will therefore not be focussed on the structural model step of LISREL.

The current study's model of a 7-component WTDS scale to be tested using LISREL as a measurement model is illustrated in Figure 13.

Figure 13. LISREL Measurement model



Key:

ξ_{1-7}	Represent hypothesised latent factors, namely, workplace trauma debriefers' experiences
$WTDS_{1-59}$	Represent empirical indicators of latent factors
θ_{1-59}	Represents measurement errors of indicators

The measurement model depicted in Figure 13 was evaluated by utilising the statistics reported for the following goodness-of- fit indices: Independence chi-square statistic; the Goodness of Fit Index (GFI); the GFI adjusted for Degrees of Freedom (AGFI); and the Root Mean Square Residual (RMR).

The chi-square statistic measures the difference between the sample correlation matrix and the fitted correlation matrix (Jöreskog & Sörbom, 1993). A non-significant chi-square statistic is an indication of a good fit between the data and the measurement model while a poor fit between the data and the measurement model is indicated when the chi-square statistic is significant (Byrne, 1994). Furthermore, a poor fit between the data and the measurement model is indicated if the chi-square statistic is large as compared to the degrees of freedom while, conversely, a good fit between the data and measurement model is indicated when the chi-square statistic is large as compared to the degrees of freedom (Jöreskog & Sörbom, 1993).

Table 10 outlines the chi-square statistics relevant to the evaluation of the fit between the data and the measurement model of the current study. Given the above parameters, it is clear that there is a poor fit between the data and the measurement model of the current study. This indicates that the measurement model should be rejected. However, it is generally accepted that the chi-square statistic should not be the sole criterion for determining goodness of fit due to its sensitivity to factors such as sample size as well as the fact that the chi-square statistic does not provide a clear indication as to the degree of fit between the data and the measurement model (Byrne, 1994; Jöreskog & Sörbom, 1993; Loehlin, 1987). As such, statistics like the GFI, AGFI, and RMR are used to assist in assessing models in LISREL (Jöreskog & Sörbom, 1993).

Table 10

LISREL goodness of fit indicators

Chi-square	2945.73 ; df = 1631; p = 0.0001
Goodness of Fit Index (GFI)	0.598
GFI adjusted for degrees of freedom (AGFI)	0.564
Root Mean Square Residual (RMR)	0.109

The GFI and AGFI do not depend on sample size explicitly and measure how much better the model fits as compared to no model at all (Jöreskog & Sörbom, 1993). According to Jöreskog & Sörbom, these measures should be between 0 and 1 with the greater the score the better the fit between the data and the measurement model. The RMR measures the mean absolute value of the difference between the covariance matrix of the data and the covariance matrix reproduced by the measurement model with the smaller the RMR, the better the model fit. The resulting scores related to these additional goodness of fit indices are presented in Table 10 and provide clear evidence that there is a poor fit between the data and the hypothesised seven-component measurement model in the current study. Exploratory factor analysis of the data relevant to the WTDS was therefore undertaken.

Exploratory factor analysis. According to Kim and Mueller (1986) there are three steps usual'y involved in the exploratory application of factor analysis. These are (1) the preparation of an appropriate covariance matrix; (2) extraction of initial (orthogonal) factors; and (3) the rotation to a terminal solution. The principal components factor analytic approach was used in the present study for the initial factor extraction process. The first principal component explains far more of the variance than any other component which makes interpretation of the results difficult (Kline, 1994). This then calls for the rotation of factors.

The varimax rotation method was used in the current study. This is an orthogonal procedure, seeking factors which are uncorrelated with each other thereby avoiding solutions containing a general factor (Loehlin, 1987).

The WTDS was developed with the aim of eliciting information relevant to seven key components of the experiences of non-professional trauma debriefers in the workplace. As indicated in the results pertaining to the LISREL confirmatory factor analysis outlined above, there was clearly poor support for the confirmation of a seven factor structure of the data from the present study. In order to further investigate the factor structure of the data a number of procedures were performed culminating in the three-factor model devised through exploratory factor analytic techniques. The first step in this process involved the computation of Pearson product-moment correlations between the 7 sub-scales of the WTDS, as conceptualised by the present researcher in Step 3 of the scale development process, the results of which appear in Table 11.

Missing data in the data set was dealt with by means of casewise mean substitution (Roth & Switzer, 1996).

Table 11

Correlations between the seven sub-scales of the WTDS (N=130) with $p < .0001$

	Selection	Training	IntMgt	Recognition	Commitment	Conflict	Satisfaction
Selection							
Training	0.33						
IntMgt	0.46	0.45					
Recognition	0.49	0.59	0.63				
Commitment	0.45	0.47	0.48	0.5			
Conflict	0.62	0.42	0.47	0.52	0.56		
Satisfaction	0.52	0.33	0.28	0.43	0.43	0.53	

Ideally there should not be a high correlation between any two factors as this would then indicate that the two factors are very similar and should not be viewed separately. As Table 11 shows, a number of factors are correlated fairly highly (> .40) with one another, while there is a clear high correlation (> .50) between others. This suggests that the relationship between items may not follow the a priori expectations taken forward from Step 3 of the scale development process. Furthermore, these results indicated that a more parsimonious factor structure may underlie these issues. Accordingly, a procedure was undertaken to reveal the number of factors using the standard techniques of principal components and varimax rotation.

Principal components factor loadings were therefore calculated and the factors were rotated by means of varimax rotation, thereby attempting to overcome factor solutions containing a general factor. Table 12 outlines the results obtained from this step.

Table 12

Varimax rotated loadings : 7-factor model of the WTDS

Stat. Factor Analysis	Factor loadings (Varimax normalised) Extraction : Principal components (Marked loadings (*) are > .400000)						
WTDS Ref. No.	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
1	-0.030709	-0.003067	0.426621 *	0.365786	0.073851	0.247486	0.417231 *
2	0.050213	-0.126876	0.567412 *	0.169310	-0.037982	0 124680	-0.026293
3	0.117814	0.041009	-0.033958	-0.017128	0.538593 *	-0.021055	0.343384
4	0.386059	0.137305	-0.022413	-0.027885	0.024785	0.173032	0.094881
5	0.039259	0.091673	0.021823	0.170947	0.142326	0.413794 *	0.133404
6	0.009633	0.510899 *	0.121124	0.379734	0.213991	0.144658	0.160508
7	0.178207	0.025998	-0.112010	0.316073	0.517518 *	0.173214	-0.051314
8	-0.077721	-0.107410	0.258881	0.142036	0.018386	0.593129 *	0.079032
9	0.198545	0.048475	0.007357	0.262793	0.097332	0.353331	0.362122
10	-0.114556	0.652644 *	0.072332	0.025843	0.033703	0.056451	0.154789
11	0.119453	0.439493 *	0.562459 *	-0.003716	0.169984	0.046996	0.186179
12	0.139034	0.139573	0.773346 *	-0.042492	0.061707	0.032875	0.060341
13	0.147371	0.230131	0.650497 *	0.141236	-0.055348	0.113469	0.040431
14	0.271466	0.174888	0.185866	0.605362 *	-0.049300	0.011500	-0.028581
15	0.268243	0.229735	0.197245	0.657386 *	-0.047415	-0.010597 1	-0.121913
16	0.082367	0.534959 *	0.192241	0.296995	0.273762	-0.001899	-0.176776
17	0 106796	-0.081703	0.542158 *	0.148874	0.357044	0.083126	-0.086501

(table continues)

WTDS Ref. No.	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
18	0.225021	0.065598	0.268662	-0.004255	0.422721 *	0.174446	0.107906
19	0.182850	0.342817	0.217221	0.231095	0.133287	0.456249 *	0.182879
20	-0.143697	0.091898	0.324199	0.400509 *	0.104336	0.294935	0.310080
21	0.318931	0.241820	0.069458	0.131474	-0.068543	0.184357	0.532360 *
22	0.098549	0.764102 *	0.126468	0.008024	0.003413	0.082836	0.146963
23	0.268609	0.268461	0.168529	0.187381	0.141175	-0.160430	0.182807
24	0.140116	0.395390	0.086769	0.115 ?	0.534723 *	0.109308	0.036371
25	-0.045079	0.173933	0.265075	-0.110829	0.468506 *	0.279124	0.085717
26	0.058808	0.316854	0.263833	-0.159085	0.512130 *	0.100729	-0.096657
27	0.063974	0.044626	-0.020965	0.444292 *	0.219739	0.177916	0.115955
28	-0.080024	0.248059	-0.001612	0.336547	0.009792	-0.064452	0.273340
29	-0.047091	-0.197593	-0.110499	0.261810	0.401676 *	0.160557	0.089351
30	0.168013	0.261073	0.133082	-0.089143	-0.073546	0.555589 *	0.293178
31	0.479635 *	-0.018318	-0.060877	0.045215	0.045029	0.406763 *	0.068446
32	-0.228562	0.129207	0.219211	0.217813	0.345981	0.225548	-0.043433
33	0.321694	-0.047257	0.029484	0.041116	0.245414	0.702885 *	0.122123
34	0.265746	0.203385	-0.105590	-0.193095	0.040814	0.255403	0.411985 *
35	-0.022686	0.603373 *	-0.070514	0.261506	-0.036638	-0.013591	0.070085
36	0.165800	0.592334 *	0.347487	0.044117	0.237486	0.130719	0.128531
37	0.068642	0.405980 *	0.461424 *	0.239253	0.126138	0.179922	0.038635
38	0.195425	0.146368	-0.067806	0.080495	0.309437	-0.172528	0.531098 *
39	0.553813 *	-0.074468	0.125491	0.054753	0.084746	0.309784	0.014668
40	0.001085	0.175503	0.170822	0.409846 *	-0.034538	0.335821	0.163476
41	0.059034	0.270014	0.309210	0.446458 *	0.137904	0.324868	0.129412
42	0.444667 *	0.083655	-0.112308	0.339755	0.242167	0.270567	0.155324
43	0.292120	0.098994	0.036486	0.029379	0.339256	0.599696 *	0.115203
44	0.336763	0.186132	0.121807	0.044793	-0.088645	0.212191	0.518562 *
45	0.075710	0.693991 *	0.039739	0.079907	-0.038066	0.161218	0.109622
46	0.259651	0.099117	0.101110	0.036155	0.064592	0.587965 *	-0.011213
47	0.072719	0.646397 *	-0.134533	0.077954	0.201170	0.126903	-0.171208
48	0.099691	0.388289	0.119397	0.180525	0.099154	0.641085 *	-0.087306
49	0.544700 *	-0.074996	0.224371	0.129745	-0.118564	0.098268	0.141973
50	0.614929 *	0.079149	0.021367	0.136537	0.118008	0.329957	-0.114589
51	0.536340 *	0.119173	0.351925	0.056228	0.100789	-0.076015	0.124495
52	0.180222	0.267142	-0.006216	0.138989	-0.061901	0.408307 *	-0.043694
53	0.465229 *	-0.114690	0.263163	0.237835	0.170613	0.189015	-0.127977
54	0.033060	0.122697	0.134348	0.381749	0.365049	0.154792	0.140803
55	0.020032	0.215907	0.250994	-0.072311	-0.183241	-0.229390	-0.323549
56	0.407888 *	0.251997	0.098487	0.314080	0.050601	0.149270	0.096219
57	0.426371 *	0.070826	0.025892	-0.225505	0.292415	-0.039630	0.099713
58	-0.096662	-0.004396	0.159145	0.091378	0.205342	0.146582	0.514430 *
59	0.255711	-0.045964	0.072605	0.176932	0.303349	0.535808 *	0.136247
Expl.Var.	3.790035	5.116304	3.785428	3.373939	3.242020	4.868881	2.672599
Prp.Tot	0.064238	0.086717	0.064160	0.057185	0.054949	0.082523	0.045298

When examining the items in the resulting seven factors shown in Table 12, it was clear that the items did not load on the assumed factors and that the items in the various factors were not conceptually cohesive.

The next step in this process involved the calculations of the eigenvalues for the seven factor model so as to determine the variance explained by these seven factors. The results appear in Table 13 and indicate that the seven factors account for 46% of the variance.

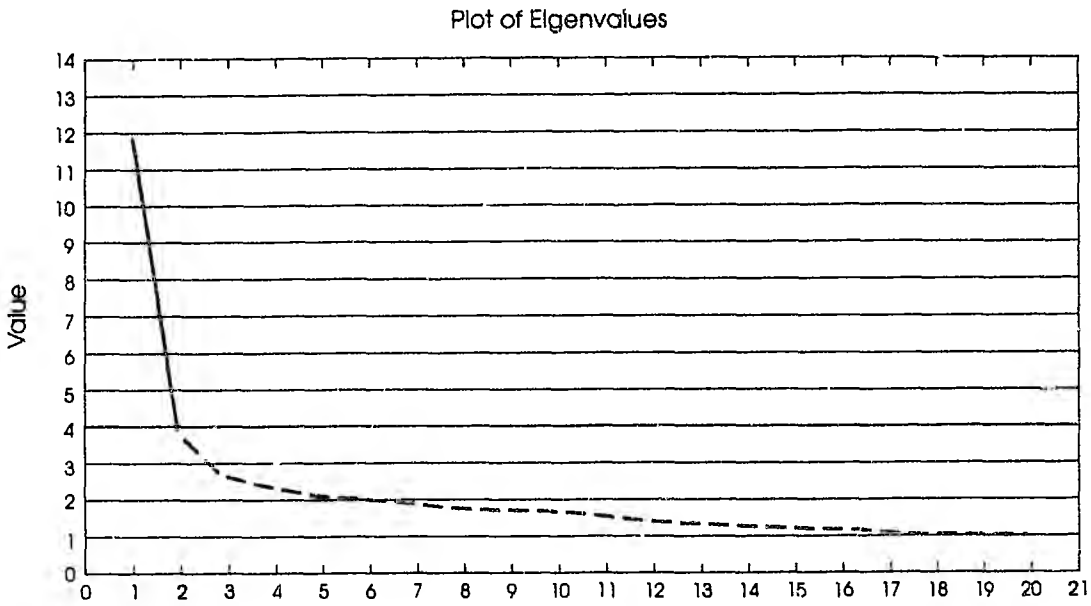
Table 13

Eigenvalues of a seven factor model of the WTDS

	Eigenvalue	% total variance	Cumulative eigenvalue	Cumulative %
Selection	11.99	20.34	11.99	20.34
Training	3.76	6.37	15.76	26.71
Int.Mgmt.	2.65	4.49	18.41	31.21
Recognition	2.30	3.90	20.73	35.14
Commitment	2.17	3.60	22.89	38.81
Conflict	2.03	3.40	24.93	42.25
Satisfaction	1.90	3.20	26.85	45.51

In addition, a scree plot of the data was examined so as to provide a visual representation of the suggested number of factors. From Figure 14, a three or four factor solution rather than the proposed seven factor solution seems to be suggested.

Figure 14. Scree plot for the 59-item WTDS



Given the evidence presented in Figure 14, it was clear that a seven-factor model of the WTDS was not acceptable. Factor analysis with four and then three factors were therefore examined. On inspection, the factor analysis run on a three-factor model was found to be conceptually and psychometrically most appropriate. The four-factor model was found to have acceptable psychometric properties, in terms of Eigenvalues, Cronbach alphas and inter-factor correlations, and also reflected the three core aspects found for the three-factor model. However, when considering the fourth factor the items were not conceptually cohesive. As such, the three-factor model, re-named the Workplace Trauma Debriefers' Scale (Revised), was adopted for the purposes of this study and the steps involved in its factor analysis will be outlined.

Principal components factor loadings were once again calculated and the factors rotated by means of varimax rotation, thereby attempting to overcome factor solutions containing a

general factor. Table 14 outlines the results obtained from this step.

Table 14

Varimax rotated loadings : 3-factor model of the WTDS

Stat. Factor Analysis	Factor Loadings (Varimax normalised) Extraction: Principal components (Marked loadings are > .400000)		
WTDS Ref. No.	Factor 1	Factor 2	Factor 3
1	0.249517	0.101138	0.546465*
2	0.002340	-0.115298	0.585055*
3	0.331222	0.164662	-0.002529
4	0.356883	0.131727	0.011925
5	0.393157	0.126984	0.153576
6	0.187589	0.574114*	0.296410
7	0.389819	0.092582	0.153269
8	0.366927	-0.090772	0.347599
9	0.502682*	0.118268	0.178747
10	-0.008465	0.670813*	0.031239
11	0.082593	0.488805*	0.470134*
12	-0.014787	0.163594	0.640348
13	0.025845	0.238123	0.625806*
14	0.102656	0.190679	0.479401*
15	0.052618	0.233245	0.516652*
16	0.016335	0.548936*	0.332914
17	0.109358	-0.029839	0.593879*
18	0.354828	0.131865	0.293576
19	-0.448200*	-0.351938	-0.116181
20	0.212661	0.182215	0.478156*
21	0.424793*	0.306607	0.121141
22	0.092984	0.765946*	0.089292
23	0.093825	0.322071	0.233282
24	0.295880	0.464572*	0.186332
25	0.284251	0.239142	0.222908
26	0.160000	0.353400	0.197953
27	0.280393	0.111393	0.243863
28	0.002756	0.313268	0.125414
29	0.282216	-0.112939	0.094025
30	0.504728*	0.266434	0.103419
31	0.584412*	-0.028464	0.061818
32	0.092274	0.184754	0.327063
33	0.773069*	-0.022795	0.169325
34	0.464675*	0.239843	-0.167555
35	-0.021947	0.609626*	0.033307
36	0.199888	0.631044*	0.330407
37	0.115224	0.435984*	0.525453*
38	0.287175	0.286613	-0.021393
39	0.520551*	-0.081117	0.229928
40	0.249361	0.211356	0.365132
41	0.286273	0.325062	0.518619*
42	0.575192*	0.134452	0.157953
43	0.703320*	0.134999	0.157853
44	0.433357*	0.241756	0.127511
45	0.132428	0.686575*	0.055041

(table continues)

WTDS Ref. No.	Factor 1	Factor 2	Factor 3
46	0.539217*	0.080270	0.193797
47	0.125549	0.623683*	-0.052263
48	0.464058*	0.367020	0.267874
49	0.324241	-0.074107	0.298393
50	0.548403*	0.051594	0.196723
51	0.231879	0.146239	0.362598
52	0.330700	0.233839	0.110349
53	0.354352	-0.110750	0.436775*
54	0.267256	0.212813	0.345677
55	-0.371479	0.139981	0.146027
56	0.343640	0.270930	0.283471
57	0.304151	0.098688	-0.038650
58	0.256960	0.116244	0.171250
59	0.641762*	0.005629	0.254590
Exp.Var	7.098	5.807	5.505

According to Kline (1994), a factor loading of .3 or greater, can be considered significant. Given the large number of items in the scale and the clear indication from the results of the 7 factor model, it was decided to rather adopt the principle of factor loadings of .4 being considered significant. Within these parameters, the following items were not found to load on any of the three factors and this would seem to indicate that the current researcher did in fact err on the side of inclusiveness in the original scale development process : WTDS3; WTDS4; WTDS5; WTDS7; WTDS8; WTDS18; WTDS23; WTDS25; WTDS26; WTDS27; WTDS28; WTDS29; WTDS32; WTDS38; WTDS40; WTDS49; WTDS51; WTDS52; WTDS54; WTDS55; WTDS56; WTDS57; WTDS58. These items were then deleted. Items WTDS11 and WTDS37 both loaded on two factors, namely, Factor 2 and Factor 3. On further investigation it was clear that they belong conceptually with the items comprising Factor 3. Table 15 presents the 3 factor model on completion of these revisions.

Table 15

Varimax rotated loadings : 3-factor revised model of the WTDS

Stat. factor analysis	Factor Loadings (Varimax normalised) Extraction: Principal components Marked loadings (*) are > .400000		
WTDS Ref. No.	Factor 1	Factor 2	Factor 3
1	0.106478	0.298562	0.485758*
2	-0 108824	0.034750	0.597003*
6	0.571332*	0.149011	0.354541
	0.121592	0.504507 *	0.137295
10	0.701956*	-0.039693	0.078746
11	0.453399*	0.117645	0.511458*
12	0.126484	0.038145	0.694103*
13	0.208196	0.108076	0.640943*
14	0.172309	0.132083	0.505134*
15	0.233880	0.089354	0.541702*
16	0.526229*	0.018517	0.396787
17	-0 [illegible]	0.128667	0.618410*
19	-0 [illegible]	-0.474376 *	-0.109228
20	[illegible] 81	0.224710	0.451814*
21	0.317451	0.447412 *	0.100664
22	0.791845*	0.096271	0.107462
24	0.435094*	0.302843	0.156127
30	0.266676	0.540367 *	0.094229
31	-0.037823	0.638564 *	0.005294
33	-0.008783	0.781184 *	0.122651
34	0.257289	0.470279 *	-0.205100
35	0.596526*	0.009989	0.029973
36	0.629639*	0.228898	0.308744
37	0.434862*	0.174157	0.499885
39	-0.121796	0.562249 *	0.235063
41	0.336363	0.334341	0.452830*
42	0.124691	0.568974 *	0.124973
43	0.116117	0.716436 *	0.123598
44	0.231233	0.453532 *	0.104670
45	0.676073*	0.184093	0.041692
46	0.068371	0.612377 *	0.127608
47	0.653317*	0.105132	-0.055005
48	0.385941	0.526487 *	0.204966
50	0.062774	0.563576 *	0 132185
53	-0.125122	0.398759	0.418114*
59	0.006087	0.652053 *	0.225784
Expl.Var.	4.921522	5.698187	4.268507
Prp. Tot 1	0.136709	0.158283	0.118570

The three factors of the 36-item WTDS(R) were finally made up of the following items as shown in Table 16.

Table 16

Workplace Trauma Debriefers Scale(R) : 3-factor model

	Programme Co-ordination
6	There are clear policies and guidelines to assist me in my role as a debriefer
10	The trauma debriefing programme is not being effectively co-ordinated in this organisation
16	My contributions to the trauma debriefing programme are appreciated and acknowledged by the trauma debriefing co-ordinator
22	The trauma debriefing programme is being effectively monitored/reviewed in this organisation
24	My opinion of this organisation has been negatively affected by my involvement in the trauma debriefing programme
35	I have adequate access to a debriefer after debriefing in an incident
36	My contributions as a trauma debriefer are not appreciated in this organisation
45	I am satisfied with the debriefing I receive after being involved in a debriefing
47	The trauma programme co-ordinator is committed to the trauma debriefing programme
	Self-Efficacy
9	The trauma debriefing training course did not equip me with the essential skills necessary to facilitate the debriefing sessions
19	I regret becoming involved in the trauma debriefing programme
21	The trauma debriefing training course equipped me to deal with my own emotional responses to the debriefing sessions
30	The trauma debriefing training course equipped me to deal with people who were emotionally distressed by the traumatic incident
31	I have experienced personal growth as a result of my involvement in the trauma debriefing programme
33	I possess the right qualities for a trauma debriefer
34	The trauma debriefing training course did not equip me to deal with people were resistant to participating in the debriefing process
39	I find it personally satisfying to be able to help others who have experienced a traumatic incident

(table continues)

42	My experience as a debriefer has enhanced my coping strategies in other situations
43	The requirements of trauma debriefing are within my capabilities
44	The trauma debriefing training course equipped me to deal with people have experienced multiple traumatic incidents (eg., numerous bank robberies)
46	I recognise the value of my work as a debriefer
48	I know what my responsibilities are in the debriefing situation
50	I have acquired new skills and knowledge as a result of my involvement in trauma debriefing
59	All in all, I feel that I am a successfuland effective debriefer

Stakeholder Commitment	
1	I am happy with the way in which I was selected as a trauma debriefer
2	My manager is committed to the trauma debriefing programme
11	My contributions to the trauma debriefing programme are appreciated and acknowledged by Top (senior) management
12	My contributions to the trauma debriefing programme are appreciated and acknowledged by my manager
13	My contributions to the trauma debriefing programme are appreciated and acknowledged by my colleagues
14	My contributions to the trauma debriefing programme are appreciated and acknowledged by the employees involved in the traumatic incidents
15	My contributions to the trauma debriefing programme are appreciated and acknowledged by the manager of employees involved in traumatic incidents
17	My manager gives me adequate support to carry out my role as a debriefer
20	It was explained to me clearly why I was selected as a trauma debriefer
37	Senior management in this organisation is committed to the trauma debriefing programme
41	The managers of employees involved in traumatic incidents give me adequate support to carry out my role as a debriefer
53	My involvement in the trauma debriefing programme has increased the contribution I make to this organisation

It is essential to note that the interpretation of the rotated factor pattern is essentially a subjective process in that the meaning given to the factor is typically based on the researcher's careful examination of what the high loading variables measure (Kim & Mueller, 1986). This process of examination of the items for conceptual clarity and cohesiveness was undertaken when considering the conceptual feasibility of the various factor options explored.

On inspection of the resulting items forming the three factors it can be seen that Factor 1 deals with trauma programme co-ordination strategies and includes items related to policies and procedures for debriefers to follow, debriefing of the debriefers, monitoring of the trauma programme, and perceived demonstrated appreciation of debriefers' involvement. As such, Factor 1 is labelled "Programme Co-ordination". The items forming Factor 2 are clearly related to the perceived effectiveness of the training course in terms of skills enhancement. In addition, Factor 2 includes items related to debriefer role satisfaction and debriefers' own perceptions of their effectiveness as debriefers. Thus, Factor 2 is labelled "Self-efficacy". Apart from item 1and 20 (which refer to debriefer selection), all the items forming Factor 3 are related to the perceived commitment to the trauma programme and perceived support of key stakeholders, namely, senior management, debriefers' managers, colleagues, and employees involved in the robbery. Therefore, Factor 3 was labelled "Stakeholder Commitment".

Table 17 outlines the results of the Pearson product-moment correlations which were calculated in order to determine the relationship between the three factors. From these results it can be seen that the correlations between these factors are still fairly high but not so high as to suggest that factors correlated are measuring the same construct (Child, 1975).

Table 17

Correlations between the three factors of the WTDS(R)

	Programme Co-ordination	Self-efficacy	Stakeholder Commitment
Programme Co-ordination			
Self-efficacy	0.44		
Stakeholder Commitment	0.54	0.49	

The next step involved the calculation of the eigenvalues of the three factor model in order to determine the variance explained by each factor. The eigenvalues are represented in

Table 18

Eigenvalues of the three factor model of the WTDS(R)

	Eigenvalue	% total variance	Cumulative Eigenvalue	Cumulative %
Programme Co-ordination	9.17	25.46	9.17	25.46
Self-efficacy	3.27	9.09	12.44	34.55
Stakeholder Commitment	2.45	6.81	14.89	41.36

The three factors are seen to account for 41% of the variance in the total WTDS(R). Thus, by reducing the scale to three factors rather than the originally hypothesised seven factors, there is only a 4% decrease in the variance explained. The decision to exclude the items discussed earlier, was supported by the fact that the three factor model which included those items was found to only account for 31% of the variance. So, by excluding these items, the variance explained by the three factor model increased by 10%.

The internal reliability for the WTDS(R) and the three factors was calculated. The Cronbach alphas are presented in Table 19 and are clearly an improvement on those of the seven factor model of the WTDS.

Table 19

Cronbach alphas and descriptive statistics for the WTDS(R) and its three factors

	Cronbach alphas	Mean	*SD*
WTDS(R) Total	0.85	147.06	16.44
Programme Co-ordination	0.85	34.51	7.51
Self-efficacy	0.82	63.6	5.71
Stakeholder Commitment	0.83	48.95	7.45

It would seem accurate to conclude that while the original WTDS may have had face validity, the WTDS(R) has better psychometric properties. As such, the analyses undertaken in Phase 2 of the current study utilised the WTDS(R) when focussing on the workplace experiences of trauma debriefers.

CHAPTER EIGHT

Results : Phase Two - Quantitative Study

Overview

The results of this phase of the research study are presented in such a way as to answer the research questions specified.[1] For each research question the results of the quantitative study will first be reported. Then, where appropriate, the results from the qualitative study will be outlined. Finally, the conclusions drawn from the results of both the qualitative and quantitative studies will be integrated in an attempt to fully answer the stipulated research questions, all of which aim to elucidate the individual and organisational consequences of the experience of being a non-professional trauma debriefer in the workplace.

Initial analyses undertaken in the quantitative study revealed that the three sub-samples only differed significantly on the research variable, Factor 1 (Programme Co-ordination) of the WTDS(R). As such, the three sub-samples were combined for all further statistical analyses. However, given the difference between the sub-samples on the one component of the WTDS(R) and that the research design adopted was aimed at highlighting specific aspects related to differing organisational contexts, where appropriate, results for the three separate sub-samples are reported in addition to those relevant to the total sample.

Research Question 1

Do non-professional workplace trauma debriefers experience secondary traumatic stress?

Tables 20 to 22 highlight the descriptive statistics related to the measures of secondary traumatic stress as operationalised by measuring the constructs of compassion fatigue, burnout, and the silencing response.

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[1]Appendix G outlines the descriptive statistics pertaining to the research variables in the present study which are not of direct relevance to the specified research questions.

Table 20

Descriptive statistics for the compassion fatigue sub-scale of the Compassion Satisfaction/Fatigue scale

	Minimum	Maximum	Mean	*SD*
Total : N=130	3	57.65	22.27	10.83
Organisation 1 : n=59	3	51	21.02	10
Organisation 2 : n=44	8	57.64	24.61	11.81
Organisation 3 : n=27	3	42	21.19	10.69

According to Stamm and Figley (1997) scores on the compassion fatigue sub-scale are to be interpreted according to the following scale. The number of subjects found within each one of these categories (and those relevant to the other indicators of secondary traumatic stress) in the present study is indicated in parentheses :

26 or less = Extremely low risk (Present study : n = 90)

27 - 30 = Low risk (Present study : n = 13)

31 - 35 = Moderate risk (Present study : n = 14)

36 - 40 = High risk (Present study : n = 3)

41 or more = Extremely high risk (Present study : n = 10)

Hence, it is clear that while some debriefers in each of the three organisations had scores indicating that they were at an extremely high risk of experiencing compassion fatigue, on average, the workplace trauma debriefers in this study were not at risk of experiencing compassion fatigue (as indicated by the mean score).

Table 21

Descriptive statistics for the burnout sub-scale of the Compassion Satisfaction/Fatigue scale

	Minimum	Maximum	Mean	*SD*
Total : N=130	4	53	19.52	9.66
Organisation 1 : n=59	4	42	19.63	8.63
Organisation 2 : n=44	5	47	19.53	9.02
Organisation 3 : n=27	6	53	19.26	12.69

Stamm and Figley (1997) stipulate that the scores on the burnout sub-scale of the Compassion Satisfaction/Fatigue sub-scale are to be interpreted as follows:

17 - 36 or less = Extremely low risk (Present study : n = 123)

37 - 50 = Moderate risk (Present study : n = 6)

51 - 75 = High risk (Present study : n = 1)

76 - 85 = Extremely high risk (Present study : n = 0)

As in the case of the compassion fatigue scores reported previously, while some subjects did obtain scores indicating that they were at high risk of experiencing burnout, on average, the workplace trauma debriefers in this sample were not at risk of experiencing burnout as operationalised by Stamm and Figley (1997). The results indicate that only one subject was found to be high or extremely high risk of experiencing burnout (n = 1) while a greater number were found to be at high to extremely high risk of experiencing compassion fatigue (n = 14).

Table 22

Descriptive statistics for the Silencing Response scale

	Minimum	Maximum	Mean	*SD*
Total : N=130	14	59	28.78	10.21
Organisation 1 : n=59	14	55	27.33	9.63
Organisation 2 : n=44	15	59	30.52	10.69
Organisation 3 : n=27	14	58	29.11	10.57

The original Silencing Response Scale includes 15 items and Baranowsky (1998) proposed that scores be interpreted in the following way:

* 95 to 150 = high risk

* 41 to 94 = moderate risk

* 21 to 40 = some risk

* 0 to 20 = minimal risk

Given that the Silencing Response Scale utilised in the current study has 14 items (item 11 was excluded in the analyses) scored on a 1 to 10 scale, the maximum score possible is 140. The scale for interpretation was adapted according to the proportions indicated in the original scale proposed by Baranowsky (1998) so as to accommodate the one less item. As such, debriefers scores on this scale can be interpreted as follows:

* 89 to 140 = high risk (Present study : n = 0)

* 39 to 88 = moderate risk (Present study : n = 22)

* 20 to 38 = some risk (Present study : n = 81)

* 0 to 19 = minimal risk (Present study : n = 27)

From this scale, and the descriptive statistics in Table 22 it can be seen that debriefers were, on average, at a relatively low risk of experiencing this form of secondary traumatic

stress. Therefore, from the three possible indicators of secondary traumatic stress as operationalised in the measurement of the constructs of compassion fatigue, burnout and the silencing response in the quantitative part of this study, it can be seen that, in general, this sample of non-professional workplace trauma debriefers did not experience secondary traumatic stress at levels indicating the need for clinical intervention (i.e., high risk), as a result of their trauma debriefing responsibilities. In line with the ideas of Stamm (1997), it was decided to measure the satisfaction subjects may experience from their trauma debriefing work. Table 23 provides the descriptive statistics related to the compassion satisfaction sub-scale of the Compassion Satisfaction/Fatigue Scale.

Table 23

Descriptive statistics for the compassion satisfaction sub-scale of the Compassion Satisfaction/Fatigue scale

	Minimum	Maximum	Mean	*SD*
Total : N=130	55	120	95.38	11.38
Organisation 1 : n=59	55	116	93.17	12.33
Organisation 2 : n=44	75	120	97.19	8.81
Organisation 3 : n=27	72	118	97.32	12.33

According to the revised version of the Compassion Satisfaction/Fatigue Self-test for Practitioners (Stamm, 1988), scores on the Compassion Satisfaction sub-scale can be interpreted as follows:

* 118 and above = extremely high potential (Present study : n = 4)

* 100 - 117 = high potential (Present study : n = 18)

* 82 - 99 = good potential (Present study : n = 95)

* 64 - 81 = modest potential (Present study : n = 8)

* below 63 = low potential (Present study : n = 2)

Although these norms are applicable to the revised scale, they do provide some guidelines for the interpretation of the scores of the debriefers in the current study. Given the mean score of 96 collected for this sample, it would seem that, on average, this sample of trauma debriefers experience a considerable degree of satisfaction from the nature of their trauma debriefing roles. Furthermore, on inspection of the details pertaining to the three organisations separately, this would seem to be the case for debriefers in each of the sub-samples.

Research Question 2

What personal variables are related to the potential experience of secondary traumatic stress? Variables to be considered include biographical data and exposure to previous work and non-work related trauma.

In order to answer this research question, for each of the aspects to be considered, Pearson product moment correlations and ANOVAS, were computed. Following this, where appropriate, multiple regression analyses were considered. The statistically significant findings relevant to each of these aspects are reported in the above mentioned order.

Biographical data

Pearson product moment correlations for the total sample (N=130) were computed between the continuous biographical variables, namely, age, length of service, and number of children, and the indicators of secondary traumatic stress (compassion fatigue, burnout, silencing response, and compassion satisfaction). None of these correlations were found to be significant at the $p<0.05$ level.

ANOVAs, for the total sample (N=130) were computed for the categorical biographical variables, namely, gender, home language, marital status, education level,

position in organisation, and geographic region, and the indicators of secondary traumatic stress. The only statistically significant finding here was a significant difference between home language groups for compassion fatigue (see Table 24). Post-hoc analysis revealed that there was a significant difference between English (n=79) and Afrikaans (n=48) speakers on their compassion fatigue scores with Afrikaans speakers scoring a significantly higher compassion fatigue mean score of 26.17 as compared to that of the English speaking group (M=19.90).

Table 24

One-way analysis of variance between home language groups on compassion fatigue

	SS Effect	df	MS Effect	SS Error	MS Error	F	p
Compassion Fatigue	1173.5	4	293.39	13959	111.68	2.63*	0.03

Therefore, it can be seen that apart from the fact that Afrikaans speakers reported higher compassion fatigue than English speakers, no other biographical variables had a statistically significant impact on any of the indicators of secondary traumatic stress.

Exposure to previous work- related trauma

In order to investigate the impact that exposure to previous work related trauma may have on the experience of secondary traumatic stress, Pearson product moment correlations were computed (N=130) between the indicators of secondary traumatic stress and: the length of time a person had been operating as a debriefer in that organisation (Debriefing Length); the total number of people a person had debriefed (Total Debriefings); and the time lapse since the person was last involved in a debriefing (Last Debriefing).

For the total sample, the only result found to be statistically significant was the relationship between compassion fatigue and the time lapse since the person was last involved in a debriefing ($r(130) = -.20$; $p<0.01$). When considering Organisation 3 separately,

compassion satisfaction was found to be significantly related to: the length of time a person had been operating as a debriefer ($r(27) = .48$; $p < 0.05$), and the total number of people a person had debriefed ($r(27) = .41$; $p < 0.05$). No other statistically significant correlations were found between these variables when considering the sub-samples separately.

Stepwise multiple regression analyses were computed to explore further the direct impact of the indicators of previous exposure to work and non-work related trauma on the measured aspects of secondary traumatic stress for the total sample as well as for each of the three sub-samples. The lack of a consistent impact of any of these variables on the indicators of secondary traumatic stress was confirmed in that, for the total sample (N=130), the only variable to have a statistically significant impact on one of these indicators, namely, compassion fatigue, was the time lapse since the subject's last involvement in a debriefing exercise ($R^2 = .04$; $F=5.37$; $p<0.05$). For the sub-sample, Organisation 3 (n=27), the length of time subjects had been operating as debriefers in that organisation (Debriefing length), was found to have a statistically significant impact on the experience of compassion satisfaction ($R^2=.23$; $F=7.49$; $p<0.05$).

Previous exposure to non-work related trauma

The potential relationship between trauma debriefers' previous exposure to non-work related trauma and their current experience of secondary traumatic stress was explored by computing Pearson product moment correlations between subjects' total scores on the Traumatic Stress Schedule(TSS) (Norris,1990) and the indicators of secondary traumatic stress. Once again, no statistically significant results were revealed. Each item of the TSS may be considered as a categorical variable with subjects responding with a "Yes" or "No" to whether a particular traumatic incident had been experienced. Within this context, one-way analyses of variance were conducted to ascertain whether the experience of any of these

non-work related traumatic incidents had an impact on subjects' experience of secondary traumatic stress. The statistically significant results from these Anovas are outlined in Table 25.

Table 25

One-way analysis of variance between items of the TSS on indicators of secondary traumatic stress (N=130)

STS indicator	TSS item	SS effect	df	MS effect	SS error	MS error	F	p
Compassion fatigue	TSS 5	681.75	1	681.75	14451.25	112.91	6.04	0.02*
Burnout	TSS 3	387.76	1	387.76	11548.53	90.93	4.26	0.04*

Post-hoc analyses showed that for item 5 of the TSS (Has a loved one ever died of an accident, homicide, or suicide?) subjects who responded "Yes" had a higher mean score on compassion fatigue (M=25.3) than those who responded "No" (M=20.66). Conversely, subjects who responded in the affirmative to item 3 of the TSS (Has anyone ever made you have sex by using force or threatening to harm you?) scored lower (M=11.67) on the burnout indicator of secondary traumatic stress than those who responded "No" (M=19.89).

Therefore, it would seem accurate to conclude that previous exposure to work or non-work related trauma, as operationalised in the present study, did not consistently have any statistically significant impact on subjects' potential experiences of the measured indicators of secondary traumatic stress.

Research Question 3

To what extent does the nature of the debriefing incident impact on the experience of secondary traumatic stress?

In order to explore this aspect of workplace trauma debriefers experiences, the impact

of having debriefed in an incident where a death and/or serious injury had occurred formed the focus of the investigations. One-way Anovas were computed on the total sample (N=130) as well as the three sub-samples to determine whether the experience of secondary traumatic stress was affected by the occurrence of, firstly, a death or, secondly, a serious injury. A total of 38 (29%) debriefers reported debriefing in an incident where a death had occurred, while 41 (32%) reported their involvement in a debriefing incident characterised by serious injury. Contrary to expectation, debriefers who debriefed in an incident where a death occurred did not differ from their counterparts on any of their scores on the secondary traumatic stress indicators. Similarly, no differences on these indicators were found between debriefers who debriefed colleagues in incidents where there had been serious injury and those who had not debriefed within that context.

Research Question 4

What organisational variables are related to the potential experience of secondary traumatic stress? Variables to be considered include the total score of the WTDS(R) as well as its three components, namely, Programme Co-ordination (Factor 1), Self-efficacy (Factor 2), and Stakeholder Commitment (Factor 3).

The first step undertaken in attempting to respond to this question, was to compute one-way Anovas on these organisational variables for the three organisations from which the subjects were drawn. As shown in Table 26, a statistically significant difference was found between the three organisations on the Programme Co-ordination component of the WTDS(R).

Table 26

One-way analysis of variance between organisations on the WTDS(R) component, Programme Co-ordination

	SS Effect	df	MS Effect	SS Error	MS Error	F	p
Programme Co-ordination	797.21	2	398.61	6482.24	51.04	7.81*	0.001

Post-hoc comparison of the means of the three organisational sub-samples on this component of the WTDS(R) showed that there was a significant difference between the mean score of Organisation 1 on Programme Co-ordination (M=37.18), as compared to those of Organisation 2 (M=32.79; $p < .01$), and Organisation 3 (M=31.48; $p < .001$).

In order to once again highlight the subtleties of organisational dynamics, the results pertaining to this section are therefore presented for the total sample as well as the three sub-samples. Pearson product- moment correlations and multiple regression analyses were computed to explore the relationship between the total and sub-component scores of the revised Workplace Trauma Debriefers Scale (WTDS(R)) and the measures of secondary traumatic stress.

Compassion fatigue

Table 27

Correlations between the three factors of the WTDS(R) scores and compassion fatigue

	Compassion Fatigue			
	Total N=130	Organisation 1 n=59	Organisation 2 n=44	Organisation 3 n=27
WTDS(R) Total	- .31**	-0.17	-.36*	-.56**
Programme Co-ordination	-. 37***	- .31*	- .42**	- .38***
Self-efficacy	- .25**	-0.14	-0.22	- .56**
Stakeholder Commitment	- .21*	-0.13	-0.2	- .39*

* $p < 0.05$

** $p < 0.01$

*** $p < 0.0001$

Table 27 highlights a strong inverse relationship between trauma programme co-ordination strategies (Factor 1) and compassion fatigue for all the sub-samples. This indicates that high satisfaction with the manner in which aspects of the trauma programme are managed, is related to low experiences of compassion fatigue. All aspects of the WTDS(R) are inversely related to compassion fatigue in the total sample, showing that the more positively the organisational variables experienced, the less likely the reported experience of compassion fatigue for the total sample. Self-efficacy (Factor 2) and Stakeholder Commitment (Factor 3) only emerge as having a statistically significant relationship to compassion fatigue when considering the total sample and the Organisational 3 sub-sample of debriefers. To further investigate these findings, multiple regression analyses were undertaken.

Table 28

Stepwise regressions with the WTDS(R) for compassion fatigue

	Variable entered	Partial R^2	Model R^2	F	p
Total Sample : N=130	Programme Co-ordination	0.15	0.15	21.97	<.0001
Organisation 1 : n=59	Programme Co-ordination	0.11	0.11	7.07	< .05
Organisation 2 : n=44	Programme Co-ordination	0.2	0.2	10.22	< .01
Organisation 3 : n=27	Self-efficacy	0.32	0.32	11.63	< .01

The relative impact of Programme Co-ordination (Factor 1) on the compassion fatigue scores of subjects in all the samples other than Organisation 3, is once again highlighted in Table 27, thereby showing the relative influence of perceived trauma programme co-ordination strategies. However, the explained variance ranges for only between 11% and 20%. Self-efficacy (Factor 2) is shown to account for a relatively high percentage (32%) of the variance in the compassion fatigue scores of subjects in Organisation 3.

Burnout

Table 29

Correlations between the three components of the WTDS(R) and burnout

	Burnout			
	Total N=130	Organisation 1 n=59	Organisation 2 n=44	Organisation 3 n=27
WTDS(R) Total	- .41***	- .30*	- .43**	- .55**
Programme Co-ordination	-. 29**	-0.25	-0.25	- .46*
Self-efficacy	- .43*	- .35**	- .41**	- .59**
Stakeholder Commitment	- .26**	- .28*	-0.17	-0.34

* $p < 0.05$

** $p < 0.01$

*** $p < 0.0001$

Table 29 shows that the burnout indicator of secondary traumatic stress is significantly related to all three of the components measured in the WTDS(R) when one focuses on the total sample. In addition, the total WTDS(R) has a moderate to strong inverse relationship with the burnout scores of debriefers across all three organisational sub-samples. Some interesting differences in these relationships arise, once again, when one considers the three sub-samples. Programme Co-ordination is the only sub-component of the WTDS(R) not found to be statistically significantly related to the burnout scores of debriefers in Organisation1 while the same is true of Stakeholder Commitment (Factor 3) for debriefers in Organisation 3. For debriefers in Organisation 2, Self-efficacy (Factor 2), is the only component of the WTDS(R) found to have a statistically significant relationship to the burnout scores of debriefers in that organisation. The relative influence of Self-efficacy (Factor 2) on

the variance of the burnout scores of debriefers across all three organisational sub-samples is highlighted in the stepwise regression results presented in Table 30.

Table 30

Stepwise regressions with the WTDS(R) for burnout

	Variable entered	Partial R^2	Model R^2	F	p
Total Sample : N=130	Self-efficacy	0.18	0.18	28.11	<.0001
Organisation 1 : n=59	Self-efficacy	0.12	0.12	8.03	<.01
Organisation 2 : n=44	Self-efficacy	0.17	0.17	8.32	<.01
Organisation 3 : n=27	Self-efficacy	0.34	0.34	13.05	<01

From Table 30 table, it can be clearly seen that Self-efficacy (Factor 2), has emerged as a clear common predictor of the variance in the burnout scores across all the sub-samples accounting for between 12% and 34% of this variance. Thus, the perceived self efficacy felt by debriefers accounted for a significant proportion of the variance in the burnout scores experienced by these debriefers

Silencing response

Results from the correlation analyses between the WTDS(R) and the silencing response, presented in Table 31, show less consistent statistically significant outcomes between these variables than those when considering compassion fatigue and burnout.

Table 31

Correlations between the three factors of the WTDS(R) and the silencing response

	Silencing Response			
	Total N=130	Organisation 1 n=59	Organisation 2 n=44	Organisation 3 n=27
WTDS(R) Total	- .28**	-0.25	-0.04	- .61**
Programme Co-ordination	-. 27**	-0.12	-0.23	- .46*
Self-efficacy	- .34***	- .39**	-0.08	- .63**
Stakeholder Commitment	-0.13	-0.16	-0.05	-0.35

* $p < 0.05$

** $p < 0.01$

*** $p < 0.0001$

Of particular interest from the results outlined in Table 31 is that Stakeholder Commitment (Factor 3) was found not to be statistically significantly related to the silencing response scores of any of the subjects across the sub-samples. Furthermore, no statistically significant results emerged between the silencing response scores and the WTDS(R) scores of debriefers in Organisation 2. The most consistent finding between these variables is that Self-efficacy (Factor 2) is statistically significantly related to the silencing response scores of debriefers across all the sub-samples with the exception of Organisation 2. These trends are further highlighted in the outcome of the stepwise regression analyses (Table 32).

Table 32

Stepwise regressions with WTDS(R) for the silencing response

	Variable entered	Partial R^2	Model R^2	F	p
Total sample : N=130	Self-efficacy	0.11	0.11	15.68	<.0001
Organisation 1 : n=59	Self-efficacy	0.14	0.14	9.36	<.01
Organisation 2 : n=44	No variable met the p<.05 level				
Organisation 3 : n=27	Self-efficacy	0.39	0.39	16.22	<.01

The results in Table 32 show that Self-efficacy (Factor 2) emerges clearly as a predictor of the variance in the silencing response scores of all the subjects barring those in Organisation 2. The variance (39%) accounted for in the Organisation 3 sub-sample is considerably higher than that pertaining to the total sample and Organisation 1. When considering Organisation 2 separately these regression results confirm the findings of the correlations calculated and clearly indicate that the organisational variables focussed on in the WTDS(R) are not related to subjects' experiences of the silencing response.

Compassion satisfaction

From Table 33 it can be seen that the various components measured in the WTDS(R) are strongly and positively related to the experience of compassion satisfaction when one looks at the total sample. This shows that the more positively the organisational components related to trauma debriefing in organisational contexts are perceived, the more positive the experience of helping others within the role of a workplace trauma debriefer.. However, when considering Organisation 2 separately, only the total WTDS(R) score and Self-efficacy (Factor 2) score are statistically significantly correlated with compassion satisfaction. Once again, these findings show that although only one statistically significant difference was found

between the three sub-samples on the key research variables, namely on the variable Programme Co-ordination, when looking at specific aspects more closely, subtle differences in relationships between variables certainly do occur. The results of the multiple regression analyses presented in Table 34 highlight this point.

Table 33

Correlations between the three factors of the WTDS(R) and compassion satisfaction

	Compassion Satisfaction			
	Total N=130	Organisation 1 n=59	Organisation 2 n=44	Organisation 3 n=27
WTDS(R) Total	.50***	.56***	.35*	.75***
Programme Co-ordination	.27**	.32**	0.11	.62**
Self-efficacy	.61***	.64***	.48**	.73***
Stakeholder Commitment	.38***	.35**	0.3	.54**

* $p < 0.05$

** $p < 0.01$

*** $p < 0.0001$

Table 34

Stepwise regressions with WTDS(R) for compassion satisfaction

	Variable entered	Partial R^2	Model R^2	F	p
Total Sample : N=130	Self-efficacy	0.36	0.36	71.16	<.0001
Organisation 1 : n=59	Self-efficacy	0.39	0.39	37.09	<.0001
Organisation 2 : n=44	Self-efficacy	0.23	0.23	12.13	< 0.01
Organisation 3 : n=27	Self-efficacy	0.53	0.53	27.78	<.0001

The variance (ranging from 23% to 53%) in the compassion satisfaction scores of subjects across all three organisations is very clearly determined by the variance in debreifer's Self-efficacy scores (Factor 2). As described previously, Self-efficacy(Factor 2) is made up of items to do with role satisfaction as well as perceived effectiveness of the skills training subjects received. Clearly there is a strong conceptual overlap between this component of the WTDS(R) and the issues measured in the Compassion Satisfaction sub-scale of the Compassion Fatigue/Satisfaction indicator of secondary traumatic stress. However, the Self-efficacy sub-component of the WTDS(R) measures issues related to the specific workplace context of the debriefers in the current study while the Compassion Satisfaction sub-scale measures more global aspects of role satisfaction experienced trauma debriefing generally.

The results presented for Research Question 4 can also be considered across organisations thereby identifying any common components of the WTDS(R) which may have emerged as predictors of the variance in the scores of the secondary traumatic stress indicators for each of the organisational sub-samples. Tables 35 to 38 summarise the trends which revealed themselves for each sub-sample and the total sample.

Table 35

Trends in the regression results with the WTDS(R) for the indicators of secondary traumatic stress for the Total sample (N=130)

WTDS(R) Predictor	Secondary traumatic stress indicator
Programme Co-ordination	Compassion fatigue
Self-efficacy	Burnout Silencing response Compassion satisfaction

Table 36

Trends in the regression results with the WTDS(R) for the indicators of secondary traumatic stress for Organisation 1 (n=59)

WTDS(R) Predictor	Secondary traumatic stress indicator
Programme Co-ordination	Compassion fatigue
Self-efficacy	Burnout Silencing response Compassion satisfaction

Table 37

Trends in the regression results with the WTDS(R) for the indicators of secondary traumatic stress for Organisation 2 (n=44)

WTDS(R) Predictor	Secondary traumatic stress indicator
Programme Co-ordination	Compassion fatigue
Self-efficacy	Burnout Compassion satisfaction

Table 38

Trends in the regression results with the WTDS(R) for the indicators of secondary traumatic stress for Organisation 3 (n=27)

WTDS(R) Predictor	Secondary traumatic stress indicator
Self-efficacy	Compassion fatigue Burnout Silencing response Compassion satisfaction

From Tables 36-38 it can be seen that Factor 2 (Self-efficacy), is a consistently key predictor of the variances in the scores of the instruments indicating secondary traumatic stress across all the organisational sub-samples. Programme Co-ordination (Factor 1) also emerged

as a consistent predictor of the variances in the scores of the secondary traumatic stress indicator, compassion fatigue, across all the sub-samples with the exception of Organisation 3. Factor 3 (Stakeholder Commitment) did not emerge as a statistically significantly consistent predictor of the variance in any of the secondary traumatic stress indicators.

Research Question 5

How, and to what extent do social support and Sense of Coherence impact on the relationship between the experiences of workplace trauma debriefers and the indicators of secondary traumatic stress.

In order to answer this research question, the relationship between social support and sense of coherence, and the indicators of secondary traumatic stress was first explored by means of Pearson product moment correlations and regressions. Following this, the moderating role of social support and Sense of Coherence in the relationship between the workplace trauma debriefers' experiences and indicators of secondary traumatic stress, was explored by calculating moderated multiple regression analyses. The results related to Sense of Coherence are discussed first.

Sense of Coherence

Given the exploratory nature of the investigation into the relationship between the construct, Sense of Coherence, and the experience of being a non-professional trauma debriefer in the workplace, the more direct relationship between subjects' Sense of Coherence and the indicators of secondary traumatic stress was firstly explored by computing Pearson product-moment correlations and multiple regressions. It is important to note, once again, that while Antonovsky (1993) specifically stated that Sense of Coherence should be considered technically as a global construct, the role of the Sense of Coherence sub-scales was focussed on in addition to the total Sense of Coherence score in the present study. This

approach was adopted due to the exploratory nature of this research and the conceptual applicability of the three Sense of Coherence sub-components to the theoretical context of the present study. Table 39 highlights the significant correlations between the total Sense of Coherence score (SOCTot) as well as its three sub-scales , namely, manageability (SOCMan), meaningfulness (SOCMean), and comprehensibility (SOCComp), and the indicators of secondary traumatic stress.

Table 39

Correlations between Sense of Coherence and indicators of secondary traumatic stress (N=130)

	SOCTot	SOCMan	SOCMean	SOCComp
Compassion fatigue	- .56***	- .54***	- .45***	- .48***
Burnout	- .59***	- .55***	- .53***	- .47***
Silencing response	- .34***	- .27**	- .33***	- .31**
Compassion satisfaction	.51***	.47***	.47***	.41***

** $p < 0.01$

*** $p < 0.0001$

These results highlight a statistically significant and strong relationship between the construct, Sense of Coherence, and the various indicators of secondary traumatic stress. When focussing purely on the relationship between the global measure of Sense of Coherence, as recommended by Antonovsky (1993), the influence of Sense of Coherence on the variance in the scores of the secondary traumatic stress indicators ranges from 12% to 35 %. Moreover, these results show that 26% of the variance in the compassion satisfaction scores can be attributed to debriefers' global Sense of Coherence. The specific impact of Sense of Coherence on secondary traumatic stress was further investigated by conducting stepwise multiple regression analyses the results of which appear in Table 40.

Table 40

Stepwise regressions for indicators of secondary traumatic stress with Sense of Coherence (N=130)

Indicator of STS	Variables in equation	Partial R2	Model R2	F	p
Compassion fatigue	SOCMan	.29	.29	52.37	<.0001
	SOCComp	.02	.35	4.17	< .05
Burnout	SOCMan	.30	.30	55.59	<.0001
	SOCMean	.03	.34	5.82	< .05
Silencing response	SOCComp	.12	.11	15.34	<.0001
	SOCMean	.03	.14	4.52	< .05
Compassion satisfaction	SOCMean	.23	.23	37.02	<.0001
	SOCComp	.03	.26	5.83	< .05

* $p < 0.0001$

From Table 40 it can be seen that Sense of Coherence contributes significantly to the variance in the secondary traumatic stress indicators as between 14% and 35% of the variance in these indicators may be predicted by a combination of the components of the Sense of Coherence construct.

The potential role of Sense of Coherence and its sub-scales as moderators between the specific aspects inherent in the workplace trauma debriefers' experiences and the secondary traumatic stress indicators measured in this study, was explored by means of moderated multiple regression analyses. In addition to the total score of the WTDS(R) and the scores of its three sub-components, the variables 'Total Debriefings', 'Debriefing Length', and 'Last Debriefing' were included as input variables. The total score on the Orientation to Life Questionnaire as well as the three sub-components of this scale were considered as potential moderators. Altogether, 112 moderated multiple regressions were computed (7 independent variables X 4 moderators X 4 secondary traumatic stress indicators)

Tables 41 to 43 highlight the situations in which the computational term (i.e. the

combined independent x moderator variable) was found to be significant in the moderated multiple regression analyses for the secondary traumatic stress indicators.

Table 41

Sense of Coherence : Significant moderating effects for compassion fatigue

Variables entered	Standardised β	Cumulative R^2	t	p
Stakeholder Commitment	-0.09		-1.21	<.05
SOCMan	-0 53	0.295	-7.05	< 0001
Stakeholder Commitment X SOCMan	-0.18	.327	-2.42	<.05

From the above table it can be seen that out of the possible 28 scenarios, a Sense of Coherence sub-component was only found to moderate the relationship in one scenario. As such, Manageability was found to moderate the relationship between Factor 3 (Stakeholder Commitment) and compassion fatigue.

Table 42 shows a similar trend for the variable burnout, as Sense of Coherence sub-components were found to moderate the relationship between the specified variables in only one of the 28 possible scenarios.

Table 42

Sense of Coherence : Significant moderator effects for burnout

Variable entered	Standardised β	Cumulative R^2	t	p
DebLength	- .08		- .96	> .05
SOCMean	- .29	.268	- 2.35	< .05
DebLength x SOCMean	- .31	.301	- 2.42	< .05

As shown in Table 43 Sense of Coherence and its sub-components were found to

moderate in 4 of the possible 28 scenarios related to the silencing response indicator of secondary traumatic stress. More specifically, the Sense of Coherence sub-components, Meaningfulness and Manageability, were found to moderate the relationship between the silencing response and Factor 3 (Stakeholder Commitment). In addition, Manageability, emerged as a moderator of the relationship between the silencing response and the total WTDS(R) score. Sense of Coherence in totality was found to moderate the relationship between Stakeholder Commitment (Factor 3) and the silencing response.

Table 43

Sense of Coherence : Significant moderating effects for the silencing response

Variables entered	Standardised β	Cumulative R^2	t	p
Stakeholder Commitment	.07		.77	> .05
SOC	.08	.118	.43	> .05
Stakeholder Commitment X SOC	- .49	.159	-2.49	< .05
Stakeholder Commitment	- .07		- .86	> .05
SOCMan	- .27	.071	- 3.18	< .01
Stakeholder Commitment X SOCMan	- .27	.145	- 3.29	< .01
WTDS(R)Tot	- .22		- 2.50	< .05
SOCMan	- .21	.105	- 2.41	< .05
WTDS(R)Tot X SOCMan	- .20	.143	- 2.37	< .05
Stakeholder Commitment	- .05		- .63	> .05
SOCMean	- .35	.109	- 4.12	<.0001
Stakeholder Commitment X SOCMean	- .21	.153	- 2.56	< .05

Sense of Coherence was not found to moderate any of the 28 possible scenarios related to compassion satisfaction. It would seem accurate to conclude, then, that although Sense of Coherence did moderate the relationship between the trauma debriefers workplace experiences and the indicators of secondary traumatic stress in some situations, on the whole it seems to operate more consistently within a main effects model. In addition, the total Sense of Coherence score (the preferred indicator of Sense of Coherence [Antonovsky, 1993]) did not emerge as a statistically significant moderator in any of the scenarios considered.

Social support

As in the case of the Sense of Coherence construct, the more direct relationship between social support and secondary traumatic stress indicators was explored by firstly computing Pearson product-moment correlations, the results of which are reported in Table 44 Results are reported for the total sample as well as the three organisational sub-samples as social support may have been context-sensitive. The potential moderating role of social support in the relationship between the workplace trauma debriefers' experiences and secondary traumatic stress indicators is considered further on.

Table 44

Correlations between social support and indicators of secondary traumatic stress

	Social Support			
	Total N=130	Organisation 1 n=59	Organisation 2 n=44	Organisation 3 n=27
Compassion fatigue	- .39***	- .40**	-0.29	- .53**
Burnout	- .38***	- .32*	- .41**	- .50**
Silencing response	- .32**	-0.22	- .31*	- .51**
Compassion satisfaction	.41***	.33*	.47**	.70***

* $p < 0.05$

** $p < 0.01$

*** $p < 0.0001$

From the R^2 which can be determined from the correlation coefficients, it can be seen that the variance in the indicators of secondary traumatic stress is moderately affected by the reported experience of social support, with this finding not being found in only two incidences, namely, when considering the silencing response for Organisation 1, and compassion fatigue for Organisation 2. When considering Organisation 3 separately, social support was found to be an even stronger predictor of the variance in the scores of the secondary traumatic stress indicators. However, as is essential to note when exclusively focussing on any of the results pertinent to Organisation 3, these results should be viewed with caution given the relatively small sample size.

The moderating role of social support was tested by computing moderated multiple regressions for the whole sample. The specific independent variables for each computation

were the total and sub-component scores of the WTDS(R) (4); and the variables 'Total Debriefings', 'Debriefing Length'; and 'Last Debriefing' (3). The dependent variables under consideration were the four indicators of secondary traumatic stress. Altogether, 28 moderated multiple regressions were calculated. The following table highlights the instances in which the computational term was found to be significant thereby indicating a moderating effect.

Table 45

Social support : Moderating effects for burnout

Variables entered	Standardised β	Cumulative R^2	t	p
DebLength	- .07		- .76	> .05
Support	- .13	. 160	- .96	> .05
DebLength X Support	- .34	. 196	- 2.33	< .05
Self-efficacy	- .31		- 3.78	< .01
Support	- .27	.240	- 3.32	< .01
Self-efficacy X Support	.186	.274	2.40	< .05

From Table 45, it is seen that social support emerged as a moderator in only 2 of the possible 7 scenarios for the burnout indicator of secondary traumatic stress. As such, social support was found to moderate the relationship between burnout and Debriefing Length (length of time as a debriefer); and burnout and Self-efficacy (Factor 2).

Table 46

Social support: Moderating effects for compassion satisfaction

Variables entered	Standardised β	Cumulative R^2	t	p
Last Deb	0.12		1.45	>.05
Support	0.57	0.175	-5.298	<.0001
Last DEB X Support	0.26	0.212	2.355	<.05

Social support emerged as an even less consistent moderator in relationships between workplace trauma debriefers' experiences and compassion satisfaction as it was found to only moderate the relationship between compassion satisfaction and the last time the debriefer was involved in a debriefing incident (Last Debriefing).

Social support was not found to moderate any of the other relationships investigated. Thus, as in the situation of sense of coherence, social support did not emerge as a consistent moderator of the relationship between workplace trauma debriefers' experiences and the indicators of secondary traumatic stress, as moderating effects were only found in 3 of the possible 28 scenarios. Once again, a main effects model may thus be seen as the most consistent to emerge in these scenarios.

Sources of social support.

Subjects were requested to indicate the source of the perceived social support in a number of the items of the Crisis Support Questionnaire (Joseph et al., 1992). The frequency of responses to these items are now outlined and indicated in the parentheses following each of the response options.

In response to the question pertaining to who is willing to listen whenever you want to talk, the debriefers responded in the following manner : mother (n = 26), father (n = 12), spouse/partner (n = 87), friend (n = 47), colleague (n = 62), debriefer "buddy" (n = 32), trauma programme co-ordinator (33), manager (38), subordinates (14).

In response to the question pertaining to who debriefers want to talk to following a debriefing exercise, subjects responded as follows : mother (n =10), father (n = 3), spouse/partner (n = 73), friend (n = 24), colleague (n = 34), debriefer "buddy" (n = 50), trauma programme co-ordinator (n = 43), manager (n = 37), subordinates (n = 6).

When asked with whom debriefers are able to talk to about their thoughts and feelings, the following responses emerged : mother (n = 25), father (n = 1), spouse/partner (n = 53), friend (n = 57), colleague (n = 47), debriefer "buddy" (n = 44), trauma programme co-ordinator (n = 30), manager (n = 37), subordinates (n = 9).

Debriefers were asked who they found to be sympathetic and supportive and responded as follows : mother (n = 27), father (n = 15), spouse/partner (n = 89), friend (n = 49), colleague (n = 55), debriefer "buddy" (n = 45), trauma programme co-ordinator (n = 42), manager (n = 42), subordinates (n = 4).

When responding to the question related to who debriefers considered to be helpful in a practical sort of way, the following trends were identified : mother (n = 22), father (n = 10), spouse/partner (n = 70), friend (n = 41), colleague (n = 53), debriefer "buddy" (n = 39), trauma programme co-ordinator (n = 38), manager (n = 39), subordinates (n = 9).

Lastly, debriefers were asked who makes them feel worse at any time and responded as follows : mother (n = 6), father (n = 3), spouse/partner (n = 19), friend (n = 7), colleague (n = 12), debriefer "buddy" (n = 3), trauma programme co-ordinator (n = 4), manager (n = 13), subordinates (n = 5).

From these trends it is clear that debriefers in the current study identified sources of social support in their home environments, the workplace in general and colleagues associated with the trauma programme in particular. When asked whether debriefers were satisfied with the support they receive after debriefing, so as to obtain a general sense of their perceived satisfaction with the social support received in this context, the following results emerged ; never (n = 4), sometimes (n = 37), often (n = 43), always (n = 46). Thus, the majority of debriefers indicated that they were more frequently than not, satisfied with the support received after debriefing.

Research Question 6

To what extent does the experience of being a workplace trauma debriefer impact on significant work attitudes such as job satisfaction and organisational commitment.

In an attempt to respond to this research question, Pearson product-moment correlations and multiple regression analyses were computed. The input variables focussed on were the sub-components of the WTDS(R).

Job Satisfaction

From Table 47 it can be seen that, for the total sample and Organisation 2, job satisfaction is correlated with all the components of the WTDS(R) at varying degrees of strength and statistical significance. However, for Organisation 1, only Programme Co-ordination (Factor 1) was found to be significantly related to job satisfaction; while in the case of Organisation 3, Programme Co-ordination (Factor 1) was the only component of the WTDS(R) that was not statistically significantly related to job satisfaction.

Table 47

Correlations between the three factors of the WTDS(R) and job satisfaction

	Job Satisfaction			
	Total N=130	Organisation 1 n=59	Organisation 2 n 44	Organisation 3 n=27
WTDS(R) Total	.38***	0.22	.51**	.51**
Programme Co-ordination	.33**	.31*	.43**	0.32
Self-efficacy	.34**	0.08	.51**	.60**
Stakeholder Commitment	.33*	0.12	.45**	.53**

* $p < 0.05$

** $p < 0.01$

*** $p < 0.0001$

The results of the stepwise regressions presented in Table 48 show that Self-efficacy (Factor 2) and Stakeholder Commitment (Factor 3) together accounted for 15% and 34% of the variance in the job satisfaction scores of debriefers when considering the total sample and Organisation 2 respectively. Programme Co-ordination was found to account for a small proportion of the variance in the job satisfaction scores of debriefers in Organisation 1 while Self-efficacy (Factor 2) accounted for a relatively large proportion of the variance in the job satisfaction scores of debriefers in Organisation 3 .

Table 48

Regressions with the WTDS(R) for job satisfaction

	Variable entered	Partial R^2	Model R^2	F	p
Total sample : N=130	Self-efficacy	0.11	0.11	16.05	<.001
	Stakeholder Commitment	0.04	0.15	5.92	<.05
Organisation 1 : n=59	Programme Co-ordination	0.09	0.09	5.62	<.05
Organisation 2 : n=44	Self-efficacy	0.26	0.26	14.07	<.01
	Stakeholder Commitment	0.08	0.34	5.02	<.05
Organisation 3 : n=27	Self-efficacy	0.35	0.35	13.72	<.01

Pearson product-moment correlations were also computed to determine the relationship between job satisfaction and the time a person had been operating as a debriefer in that organisation (Debriefing Length) and the total number of people a person had debriefed (Total Debriefings). For the total sample only the total number of people a person had debriefed was found to be statistically significantly related to job satisfaction ($r(130) = -.20$; $p < 0.05$). No statistically significant relationships were found between these variables for Organisation 1 or Organisation 2. For Organisation 3, 'Total Debriefings' emerged as being significantly correlated with job satisfaction ($r(27) = -.39$; $p < 0.05$).

Organisational Commitment

When focussing on the variable, organisational commitment (see Tables 49 and 50), statistically significant relationships between the components of the WTDS(R), for the total sample as well as the Organisation 2 and 3 sub-samples were found once again. Moreover, the subtle differences between organisational contexts are once again evident in that the

relationships between organisational commitment and the WTDS(R) are clearly different for debriefers in Organisation 1 as compared to their counterparts in Organisations 2 and 3. For Organisation 1, Programme Co-ordination (Factor 1) emerged as the only sub-component of the WTDS(R) to be related to the debriefers' organisational commitment scores.

Table 49

Correlations between the three factors of the WTDS(R) and organisational commitment

	Organisational Commitment			
	Total N =130	Organisation 1 n=59	Organisation 2 n=44	Organisation 3 n=27
WTDS(R) Total	.30**	0.13	.31*	.56**
Programme Co-ordination	36***	.26*	.42**	.45*
Self-efficacy	.20*	-0.03	.30*	.50*
Stakeholder Commitment	.30**	0.03	.44**	.60**

* $p < 0.05$

** $p < 0.01$

*** $p < 0.0001$

Table 50

Stepwise regressions with WTDS(R) for organisational commitment

	Variable entered	Partial R^2	Model R^2	F	p
Total sample : N=130	Programme Co-ordination	0.11	0.11	15.96	<.0001
Organisation 1 : n=59	Programme Co-ordination	0.07	0.07	4.10	<.05
Organisation 2 : n=44	Stakeholder Commitment	0.2	0.2	9.97	<.01
Organisation 3 : n=27	Stakeholder Commitment	0.36	0.36	14.18	<.01

From the results presented in Table 50 the Programme Co-ordination (Factor 1) accounts for a relatively small proportion of the variance in the organisational commitment scores of debriefers for the sample as a whole and for debriefers in Organisation 1. Stakeholder Commitment (Factor 3) emerges as a stronger predictor of the variance in the organisational commitment scores of debriefers when considering Organisations 2 and 3 separately.

As in the situation with job satisfaction, organisational commitment was correlated with the time a person had been operating as a debriefer in that organisation (Debriefing Length) and the total number of people a person had debriefed (Total Debriefings). For the total sample a statistically significant inverse relationship was found between 'Total Debriefings' and organisational commitment ($r(130) = -.20$; $p < 0.05$). The same relationship was found to be significant for Organisation 1 ($r(59) = -.28$; $p < 0.05$); and Organisation 2 ($r(27) = -.34$; $p < 0.05$). No statistically significant relationships were found between these variables for Organisation 3.

In a further attempt to explore the relationship between the experiences of

non-professional trauma debriefers in the workplace and key organisational outcomes, the relationship between the indicators of secondary traumatic stress and job satisfaction and organisational commitment was investigated. For the total sample, job satisfaction was found to be statistically significantly related to : compassion fatigue ($r(130) = -.31$; $p < 0.01$); burnout ($r(130) = -.39$; $p < 0.0001$); and compassion satisfaction ($r(130) = .19$; $p < 0.05$). Organisational commitment was found to be related to burnout ($r(130) = -.25$; $p < 0.01$).

When considering these relationships in the three organisational sub-samples, the only statistically significant relationship to emerge for Organisation 1 was between organisational commitment and burnout ($r(59) = -.26$; $p < 0.05$). For Organisation 2, job satisfaction was found to be significantly related to : compassion fatigue ($r(44) = -.39$; $p < 0.01$); burnout ($r(44) = -.51$; $p < 0.01$): and compassion satisfaction ($r(44) = .33$; $p < 0.05$). For Organisation 3, job satisfaction was significantly related to compassion fatigue ($r(27) = -.40$; $p < 0.05$) and burnout ($r(27) = -.51$; $p < 0.01$). Table 51 outlines the results of the stepwise regressions computed for these variables.

Table 51

Stepwise regressions with the secondary traumatic stress indicators for job satisfaction (N=130)

	Variable entered	Partial R^2	Model R^2	F	p
Total sample : N=130	Burnout	0.39	0.15	23.09	<.0001
Organisation 1: n=59	No variables met the .05 significance level				
Organisation 2: n=44	Burnout	0.51	0.26	14.25	<.01
Organisation 3: n=27	No variables met the .05 significance level	0.36	0.36	14.18	<.01

From the results highlighted in Table 51, burnout emerges as a common predictor of the variance in the job satisfaction scores of debriefers in the total sample as well as for Organisation 2. However, none of the other indicators of secondary traumatic stress were found to be significant predictors of the variance in the job satisfaction scores of any of the sub-samples. The results of the stepwise regression analyses for organisational commitment showed that none of the indicators of secondary traumatic stress were found to be statistically significant predictors of the variance in the organisation commitment scores.

The trends which emerged in the regression analyses for these work attitudes in each of the organisational settings are outlined in the following table. A predictor is only outlined in the table if it was found to predict for both job satisfaction and organisational commitment.

Table 52

Trends in the regression results with the WTDS(R) for organisational commitment and job satisfaction in the three organisational sub-samples

	WTDS/WTDS(R) predictors
Total sample : N=130	Programme Co-ordination Self-efficacy Stakeholder Commitment Burnout
Organisation 1 : n=59	Programme Co-ordination
Organisation 2 : n=44	Self-efficacy Stakeholder Commitment
Organisation 3 : n=27	Self-efficacy

Research Question 7

How, and to what extent, do social support and Sense of Coherence impact on the relationship between the experiences of workplace trauma debriefers and job satisfaction, and organisational commitment?

Correlations and regressions were calculated as a preliminary step in exploring the relationship between social support, Sense of Coherence, and job satisfaction and organisational commitment. Statistically significant correlations were found between Sense of Coherence and these work attitudes as shown in Table 53.

Table 53

Correlations between Sense of Coherence, social support, and job satisfaction and organisational commitment

	SOC(Tot)	SOC(Comp)	SOC(Man)	SOC(Mean)	Social Support
Job satisfaction	.46***	.33***	.49***	.40***	.35***
Organisational commitment	.33**	.28**	.33***	.24**	.26**

* $p < 0.05$

** $p < 0.01$

*** $p < 0.0001$

From Table 53, it can be seen that a statistically strong and significant relationship emerged between job satisfaction and Sense of Coherence and its sub-scales; while significant but weaker relationships were found between organisational commitment and Sense of Coherence and its sub-scales. A similar pattern emerged in the relationships found between these work attitudes and social support. The relationships between these variables were further explored by calculating stepwise regressions for job satisfaction and organisational commitment. For the total sample (N = 130), the sub-scale, Manageability, emerged as the most significant predictor of the variance in the job satisfaction scores ($R^2 = .24$; $F = 40.06$; $p < .0001$); as well as for the variance in the organisational commitment scores ($R^2 = .11$; $F = 16.01$; $p < .0001$).

In order to test the moderating effects of Sense of Coherence and social support in this context, moderated multiple regressions were once again calculated. The specific independent variables for each computation were the total and sub-component scores of the WTDS(R) (4); and the variables 'Total Debriefings', 'Debriefing Length'; and 'Last Debriefing' (3). Social support, the three Sense of Coherence sub-component scores and the total Sense of Coherence score were considered as moderators (5). Altogether, 70 moderated multiple regressions were computed (7 independent variables X 5 moderators X 2 dependent variables). The following table highlights the specific instance in which the computational term was found to be significant, thereby indicating the existence of a moderating effect.

Table 54

Sense of Coherence : Moderating effects for job satisfaction

Variables entered	Standardised β	Cumulative R^2	t	p
DebLength	.042		.51	>.05
SOCMan	.212	.221	1.65	>.05
DebLength X SOCMan	.329	.258	2.48	<.05

Table 54 shows that Sense of Coherence is not a consistent moderator of the relationship between workplace trauma debriefers' experiences and job satisfaction. Only the sub-component, Manageability, was found to moderate the relationship between Debriefing Length and job satisfaction.

Similarly, Sense of Coherence and its sub-scales were not found to be consistent moderators in the relationship between workplace trauma debriefers' experiences and organisational commitment. As shown in Table 55, only the sub-component,

Comprehensibility, was found to moderate the relationship between Self-efficacy (Factor 2) and organisational commitment.

Table 55

Sense of Coherence : Moderating effects for organisational commitment

Variables entered	Standardised β	Cumulative R^2	t	p
Self-efficacy	0.16		1.69	>.05
SOCComp	0.24	0.141	2.56	<.05
Self-efficacy X SOCComp	-.20	.180	-2.42	< 05

From Tables 54 and 55 it can be seen that moderating effects were only found in 2 of the possible 56 scenarios. Therefore, it would seem accurate to conclude that Sense of Coherence and its sub-components is not a consistent moderating variable between workplace trauma debriefers' experiences and significant work attitudes such as job satisfaction and organisational commitment. Once again, a main effects model may therefore be the most accurate one to describe the role of Sense of Coherence in the relationship between workplace trauma debriefers' experiences and significant work attitudes. However, a completely different outcome emerged when considering the role of social support in the relationship between workplace trauma debriefers' experiences and these work attitudes.

Tables 56 and 57 show that social support emerged as a consistent moderator of the relationship between workplace trauma debriefers' experiences and job satisfaction (4 out of a possible 7 scenarios), and organisational commitment (2 out of a possible 7 scenarios).

Table 56

Social support : Moderating effects for job satisfaction

Variables entered	Standardised β	Cumulative R^2	t	p
Programme Co-ordination	.13		1.69	>.05
Support	.24	.141	2.56	<.05
Programme Co-ordination X Support	-.20	180	-2.42	<.05
Self-efficacy	.22		2.57	<.05
Support	.28	.172	3.30	<.01
Self-efficacy X Support	-.25	.232	-3.11	<.01
Stakeholder Commitment	.21		2.39	<.05
Support	.24	.164	2.71	<.01
Stakeholder Commitment X Support	-.23	.214	-2.81	<.01
WTDS(R)Tot	.30		3.26	<.01
Support	.16	.186	1.74	>.05
WTDS(R)Tot X Support	-.29	.272	-3.82	< 01

From Table 56 it can be seen that social support has moderated the relationship between job satisfaction and the total WTDS(R) score as well as all its sub-scales .

Table 57

Social support : Moderating effects for organisational commitment

Variables entered	Standardised β	[illegible]	t	p
Stakeholder Commitment	.22		2.41	<.05
Support	.15	113	1.60	>.05
Stakeholder Commitment X Support	-.22	.160	-2.63	<.01
WTDS(R)Tot	.30		3.19	<.01
Support	.07	.135	.73	>.05
WTDS(R)Tot X Support	-.24	.194	-3.00	<.01

Table 57 shows that social support emerged as a moderator between organisational commitment and the WTDS(R) total score; and between organisational commitment and Stakeholder Commitment (Factor 3).

In summary, it would seem accurate to conclude that a main effects model (i.e., the variable is seen as operating as an independent variable) is most appropriate for Sense of Coherence in the relationship between the experiences of workplace trauma debriefers and important work attitudes such as job satisfaction and organisational commitment. Conversely, a combination of a moderating and main effects model would seem to be more appropriate for social support in this context.

The trends to have emerged in the quantitative part of this study were explored in more detail in the interviews conducted with a sub-sample of debriefers in Phase 3 of the present study. The findings from these interviews will now be presented and the results to have

emerged from both the quantitative and qualitative studies will be discussed within the context of the literature reviewed, in the Discussion chapter.

CHAPTER NINE

Results: Phase Three : Qualitative Study

Overview

Focussed interviews were conducted with 30 debriefers : 10 from each of the three organisations. Each debriefer was selected on the bais that he or she had been involved in a bank robbery debriefing call-out in Gauteng, 6 weeks previously. The majority of debriefers interviewed had prior experience as debriefers in bank robberies while 5 were first-time debriefers. Twenty-two debriefers interviewed were female with eight being male.

In Organisation 1, debriefers debriefed on average 4.4 employees with a range of 1 to 10 at that specific debriefing call-out; In Organisation 2, debriefers debriefed on average 4.9 employees with a range of 3 to 7; while in Organisation 3, the average number of employees debriefed was 3.3 with a range of 1 to 6. One of the bank robberies involved the death of a security guard; 22 of the robberies were characterised by physical abuse with minor injuries; and all involved verbal abuse.

The aim of the interviews was to further explore and clarify the findings which emerged in the quantitative phase of this study. A number of themes common to all 30 debriefers interviewed emerged from the process. As such, findings relevant to these themes are reported for the whole sample and only where relevant is specific reference made to responses from debriefers from specific organisations. However, some critical differences emerged between the responses of subjects drawn from the different organisations when issues related to the management of the trauma debriefing programme were focussed on. Findings in this regard are, therefore, reported for each organisation separately. It should be noted that debriefers gave multiple responses to the questions asked, with the result being that the cumulative total of the frequencies reported on the responses under specific themes, will not

necessarily equal the sample size. Where appropriate direct quotations are cited and a number identifying the particular debriefer as well as his or her organisation (A = respondent from Organisation 1; B = respondent from Organisation 2; and C = respondent from Organisation 3), is included at the end of the quotation.

The findings are reported under the following key headings :

* Self -efficacy

* Personal impact

* Work-related consequences

* Reactions of key parties

* Trauma programme co-ordination

* Personal commitment to debriefing

Self-efficacy

In order to determine the extent to which debriefers felt satisfied with their own debriefing competence in their last debriefing call-out, they were asked to reflect on what they felt they had done well in the debriefing process and what they felt could have been improved. The responses to these questions provide an indication of the debriefers' perceived self efficacy in the debriefing context.

Self evaluation of debriefing effectiveness

In response to the question regarding what aspects of the process debriefers felt they had dealt with effectively, generally debriefers reported feeling satisfied with their performance in their last debriefing call-out. Most debriefers reported that they felt they were effective in skills related to developing rapport and getting employees to feel comfortable to talk about their experiences. More specifically, 13 debriefers felt that they listened effectively and 14 stated that they felt they asked appropriate questions thereby helping employees to talk openly

about their experiences. Five debriefers, reported explicitly that they were effective in demonstrating empathy and respect.

Debriefers are trained to follow a four-stage debriefing process and 10 debriefers stated that they had followed these stages successfully. Nine debriefers felt that they were particularly effective in being able to calm employees so that they were in a position to re-gain control of their emotions and behaviour. Two debriefers reported that despite not being officially on call, they were particularly pleased with their ability to leave their work problems at work, and to make themselves emotionally and physically available. One debriefer reported feeling that she had been effective in identifying and dealing with the employee's additional personal problems that arose out of the debriefing process.

Debriefers were then asked to recall any difficult aspects of the debriefing process. When discussing issues debriefers had experienced as being difficult, a wide range of responses were received and are listed in Table 58.

Table 58

Problems experienced in the debriefing room

Response	n
No difficulties	4
Control of own emotions	1
Employees involved in multiple robberies	4
Resistant employees	5
Employees claiming to be "Okay" but clearly not okay	5
Own questioning of process effectiveness	4
"Guilt" expressed by employees	3
Debriefing inexperience	3
Language barriers	3
Expressions of racism	1
Emergence of employees' personal problems	4
Angry family members of employees	2
Called out when not on duty	4
Not debriefing customers and security guards	2
Disorganisation amongst debriefers	2
Insufficient call-out details provided	1
Anger expressed toward bank	2
Lack of commitment from fellow debriefers	2

From these [illegible] it would seem that debriefers were, on the whole, satisfied with their debriefing performance indicating perceptions of general self efficacy in the debriefing context. On reflection, however, a number of factors were identified as causing debriefers some difficulty in the process. The findings presented in Table 58 suggest that these factors fall into three main categories, namely, debriefer characteristics, individual employee reaction.

and practical programme co-ordination issues.

Personal Impact

Debriefers are clearly active participants in a dynamic two-way process. In order to assess the personal impact incurred due to involvement in this process, debriefers were asked to recall their thoughts and feelings during the debriefing process, as well as their thoughts and feelings after completion of their debriefing responsibilities for the day. In addition, debriefers were asked how their involvement had impacted on their personal lives and their world-views.

Thoughts and feelings during debriefing

While debriefing, debriefers reported feelings of: compassion and a desire to help (14); relief that no-one was injured (2); anger towards robbers (5); helplessness and futility (6), anger towards bank management (5); and sadness (1). One debriefer expressed the anger she felt towards the robbers by saying "People just have no right to do this to others." (4A), while another said that "I wish they [the robbers] could come back and see the damage caused." (6A). Feelings of helplessness and futility emerged from responses such as "We can only do so much..." (9A); "Am I really helping? We've done this so often before." (1B); " Nothing changes and we'll get called out again soon." (5B); and "Not again! How do these people work in this branch?" (8C). Anger toward the bank was expressed in responses from debriefers in Organisations 2 and 3 reflecting head office's perceived lack of a caring attitude in these organisations: "Why can't the bank really do something ?!" (1B); and "Nothing has been done since the last robbery. There are still bullet holes around." (1C).

Some debriefers reported focussing on their own situations during the debriefing process. For instance, two debriefers reported asking themselves "What would I have done in the situation? What about my family?" (6B and 3C). Another debriefer reported feeling concerned about the work waiting for her at the office and concerned about being adversely

affected by exposure to others' trauma as this had happened once before (7C). Two debriefers reported feeling unsure about their ability to help the employees they were debriefing. For instance, one of these debriefers reported that she was "...scared of saying the wrong thing." (3B). One debriefer reported feeling frustrated at constantly being interrupted while debriefing.

Positive thoughts and feelings were also explicitly recounted in that 2 debriefers found the process to be interesting, and one reported that during the process he questioned his own racial stereotypes by thinking to himself "These people are black and it is still traumatic for them." (3C). One debriefer reported feelings of amazement that the employees being debriefed had seemingly coped so well. Four debriefers could not recall any of their own thoughts and feelings during the process as they stated that their attention was focussed completely on the employee they were debriefing.

Thoughts and feelings after debriefing

Debriefers were asked to reflect on their thoughts and feelings once they had completed debriefing for the day. Three people reported feelings of relief that it was over for the day and another five had feelings associated with satisfaction that they were able to be of assistance. Six debriefers reported feeling extremely tired ("Absolutely drained!" (6A) and two other debriefers reported having severe headaches following the day's debriefing . Whereas three debriefers stated that they were able to distance themselves from the debriefing experience immediately afterwards, eight debriefers recounted feeling worried and concerned for the employees they had debriefed. Moreover, three debriefers specifically mentioned feelings of concern related to the other personal problems raised by the employees they were debriefing.

Furthermore, five debriefers reported feeling emotional and depressed after debriefing.

Three debriefers reported reflecting on their own lives and their own vulnerability and a further two debriefers linked this explicitly to the current violent South African context. Two debriefers recalled having feelings of dread that they were required to return to the bank the next day. Another two debriefers reported feeling particularly anxious at the prospect of having to walk into a bank again. Four debriefers stated that at the end of the debriefing activities for that day, they questioned their effectiveness in being able to assist the employees they had debriefed. Four debriefers reported feelings of anger towards the robbers while another two debriefers reported experiencing feelings of anger directed towards the bank at the end of the day's debriefing activities. Lastly, two of the debriefers from Organisation 3 expressed feelings of dissatisfaction with the debriefing process after their last debriefing incident as reflected in statements such as "That was the beginning of the end for me [as a debriefer]" (2C).

Effect of debriefing on home life

Debriefers were asked to reflect on whether their involvement in debriefing that day had any effect on their home life. Seven debriefers reported that their debriefing experience that day had no effect on their family life. Table 59 reflects the wide range of responses received from the other debriefers. These responses should also be seen in conjunction with the previous results reported regarding debriefers' thoughts and feelings following the day's debriefing activities.

Table 59

Problems experienced in the debriefing room

Response	n
Spoke about the experience with home partner	9
Felt worried and concerned about the employees debriefed	5
Felt exhausted	4
Dreamt about the debriefing experience	1
Reflected on own life	3
Felt very emotional	4
Felt hyped-up (could not relax)	2
Felt the need to be more vigilant	3
Felt apprehensive about having to return to the bank the next day for follow-up	2

Debriefers reported that these responses emanating from the debriefing process, lasted for between 1 and 7 days. No debriefer reported still experiencing these symptoms at the time of the interview that is 6 weeks after the debriefing incident. These results indicate that debriefers within this context, tend to display symptoms of acute traumatic stress rather than secondary traumatic stress disorder.

Impact on world-view

Table 60 reflects the broad range of responses received from debriefers when asked whether the debriefing experience had resulted in them re-evaluating their views about life in general.

Table 60

Debriefing effects on world-views

Response	n
Sensitised to the suffering of others	13
Become more vigilant	8
Become more aware of own and family's vulnerability	6
Strengthened spiritual beliefs	1
Emphasises the need to appreciate life more as it is so transitory	7
Reinforced the importance of family and support structures	3
Questioned belief systems about people and organisations	2
Angered by multiple robberies and being "caught in the middle" between victims and head office	1
Saddened by proliferation of crime in South Africa	3
Empowered by being ableto make a contribution	1
Emphasised the value of people and the organisation's responsibility to value them	1
Reinforced racist attitude	1

Debriefers indicated that these views/attitudes/beliefs, while triggered by the debriefing incident, were still held currently.

In Table 60 the findings clearly indicate that involvement in the debriefing process had a considerable personal effect on the majority of the debriefers at a number of different levels. Intense thoughts and feelings both during and following the debriefing incident were recalled, and in a number of cases the debriefing exercise was felt to have had an influence on debriefers' home lives. There is clear evidence that involvement in the debriefing process challenged the personal values and attitudes of a number of the debriefers.

Work-related Consequences

One of the unique characteristics of the sample of debriefers in the present study, is that they undertake the responsibilities involved in debriefing in their respective organisations over-and-above their full-time employment commitments. As such, this provided the opportunity to explore how these two roles related to one another. More specifically, debriefers were asked to what extent their debriefing involvement had affected their other work demands, and whether their involvement in the debriefing process had influenced their views of their respective organisations in any way.

Effect of debriefing on work commitments

As mentioned earlier, the debriefers in this study all undertake their debriefing responsibilities over-and-above their full-time employment commitments, and were therefore asked how their debriefing experience that day had affected their full-time work demands. The majority (20) of the debriefers felt that, although the call-out clearly added to their workloads, there was no negative impact on their work as they were able to reschedule their work commitments and complete their work activities in their own time. One debriefer went as far as to say "[Robberies] Becomes part of our lives. Robberies have lost their novelty now." (1B).

Six debriefers reported needing a little time to gather themselves before being able to apply themselves to their work on return to the office following a debriefing call-out. Another two debriefers reported lapses in their concentration while attending to their work commitments following debriefing that day ("I feel a little brain-dead afterwards." [8A]). One debriefer added that she felt irritated by the disruption of her work as she was not officially scheduled to be on debriefing call-out duty Another debriefer reported feeling frustrated and anxious as the debriefing call-out resulted in her delaying a meeting which she had scheduled.

Impact on career and view of the organisation

Debriefers were asked whether their involvement in the debriefing programme had affected their view of the organisation and their career in it. Six debriefers, three from Organisation 2 and three from Organisation 3, stated that debriefing had no impact on their views of the organisation and their careers as they viewed debriefing and their full-time work commitments as totally separate domains. Two other debriefers from Organisation 3 and one other from Organisation 2 reported that their involvement with the debriefing programme had reinforced their perception that top management does not really care about their staff. A further two debriefers from Organisation 2 reported that their involvement in the trauma debriefing programme made them question whether there was not something more Head Office should be doing about the robberies.

The majority of responses, however, indicated that debriefers (15) viewed their organisations in a positive light given their involvement in debriefing. For instance, one debriefer said "I can see there is care for employees." (1A) and another stated that "People in organisations even like the police don't have this [debriefing programme]." (4A) while another stated "I am proud to be part of an organisation that helps others." (1B). Two debriefers said that they felt particularly honoured to have been selected as debriefers. Another four debriefers commented on having learnt a great deal from debriefing while a further three mentioned that debriefing added a new dimension to their full-time jobs.

From these findings it would seem that, despite the addition to their work load , debriefers are, in general, able to deal effectively with their full-time work commitments and the additional responsibilities entailed in debriefing. Short-term negative impact of the debriefing experiences on their current work demands were reported by some but not the majority of debriefers. With reference to whether the debriefing experience had influenced

debriefers' general views of their organisations, the majority of debriefers reported considering their respective organisations in a more positive light as a result of their involvement in the debriefing process thereby indicating increased organisational commitment. However, the exact opposite impression was reported by four other debriefers largely as a result of their negative experience with factors concerning the trauma programme co-ordination. Clearly, then, involvement in trauma debriefing in the workplace has the potential to reinforce debriefers' level of organisational commitment.

Reactions of Key Parties

The debriefers in the current study were operating within an organisational context in which they were subjected to the reactions of a number of key parties, such as the employees of the branch that had experienced the robbery, and their (debriefers) own managers, when responding to the debriefing call-out. Accordingly, they were asked explicitly what these reactions were and how they were affected by them in order to explore factors that may potentially influence the experience of role conflict.

Response from branch employees

Debriefers were asked about the response they received on arrival at the branch where a robbery had occurred. The majority of debriefers reported positive responses from employees and described their reactions as being welcoming (8), appreciative (9), expectant (3), and relief (8). One debriefer described their response as "They expected something magical .... and almost look forward to talking to you." (1A). Another debriefer reported that, on her arrival, employees were "...surprised - couldn't believe someone would listen to them." (7A) and another stated that employees said "Thank goodness! At least you are here." (5B). Three debriefers mentioned that employees were familiar with the procedure as they had been involved in previous robberies, while ten debriefers explicitly reported branch employees being

in a sense of shock and confusion rather than showing any direct reaction to the debriefer's arrival.

Those debriefers who experienced a positive response from the bank employees involved in the robbery reported that this made them feel good (12), that it reinforced their commitment to debriefing (10), and that it emphasised the fact that these people really were in a time of need (6). For instance, one debriefer described her feelings as "It feels like you are doing something right." (5A). One debriefer reported feeling emotional on experiencing the response from the bank employees. Three debriefers reported feelings of relief due to there not being any deaths or serious injuries in the incident.

In contrast to the above findings, a number of debriefers reported negative reactions from branch employees on their arrival at the branch where the robbery had taken place. Eight debriefers experienced scepticism and resistance on the part of the branch employees on their arrival. "We don't want you arseholes from head office here!!!" was one response a debriefer reported (1C) from an employee in a branch that had experienced multiple robberies. Also, one of these debriefers stated that the resistance she encountered was from the young male employees in the branch. Barring one response of scepticism, these negative experiences were reported from debriefers in Organisations 2 and 3. Moreover, three of the debriefers from Organisation 3 and one debriefer from Organisation 2 reported experiencing confusion amongst the team of debriefers themselves in terms of their roles and co-ordination of the team's activities. This resulted in feelings of anger, irritation, and role conflict.

The negative experiences in terms of the branch employees' reactions on the arrival of the debriefers at the branch resulted in one debriefer reporting feeling useless and rejected, another two debriefers feeling confused about their roles, while three debriefers were not perturbed by this response. One of the debriefers who expressed role confusion in this context

stated " It's (bank robberies) happening so often and getting more violent - words become cheap" (8C).

Management's response

The majority of debriefers (20) reported that their managers were supportive when they received the debriefing call-out. The over-riding attitude seemed to be that managers supported the debriefing task and expected debriefers to get their work done in their own time if they were responding to a call-out. Eight debriefers reported working independently and therefore their managers were not aware of their involvement in a debriefing call-out. Two debriefers reported that their managers made them feel guilty about leaving or delaying their work commitments to respond to a debriefing call-out, and two debriefers from Organisation 3 stated that their managers were not supportive of their debriefing activities.

From these findings, it is clear that the reactions of significant parties in the debriefing context can have a strong impact on aspects such as a debriefer's role conflict and role commitment.

Trauma Programme Co-ordination

Debriefing in all three organisations in the present study, formed part of a co-ordinated strategy involving: debriefer selection; training; scheduling debriefer duties; procedures to follow before, during, and after a debriefing incident; logistical arrangements; and feedback and follow-up activities. In order to explore the potential impact of these factors on the experiences of the debriefers, they were asked to identify facilitating and hindering factors in the debriefing process as well as explicit questions around the trauma programme co-ordination.

Facilitating and hindering factors

Debriefers were asked to recall factors which may have helped or hindered their ability

to perform their debriefing responsibilities. The responses obtained are listed in Tables 61 and 62.

Table 61

Facilitating factors for debriefers' performance

Response	n
Knowledge that help was needed	5
Own time availability	2
Own confidence / inner strength	4
Debriefing training received	9
Felt assistance was appreciated	4
Personal experiences	2
Previous debriefing experience	3
Own commitment to the process	3
Effective practical organisation factors	5
Support from programme co-ordinator	2
Support from fellow debriefers	9
Support from own manager	3
Support from colleagues	1
Support from friends and family	2
Ability to reschedule other activities	2

Table 62

Hindering factors against debriefers' performance

Response	n
No problems encountered	10
Time constraints	1
Called out when not on duty	3
Aggressive attitude of police and investigators	8
Lack of support from own manager	2
Interruptions	2
Own personal problems	1
Resistant employees	2
Debriefing inexperience	6
Disorganisation on arrival at bank	2
Called out too frequently	1
Detailed call-out information inadequate	1
Own questioning of the intervention effectiveness	1
Expected inadequate support from the programme co-ordinator	1
Lack of organised strategy within debriefing team	4
Employees raising other job-related concerns	1
Commitment of other debriefers questioned	3

It would seem from these findings that a combination of issues related to personal attitudes and characteristics, support from significant others, and logistical organisational factors are viewed as having the potential to impact constructively or destructively on a debriefer's ability to perform effectively in the debriefing context. These factors are all within the domain of the programme co-ordinator's potential influence and provide a broad overview of factors requiring consideration in evaluating programme co-ordination strategies.

Perceived effectiveness of trauma programme co-ordination

Different trends emerged in the responses of debriefers from the organisations when explicitly asked about their views on the way in which the trauma programme was being co-ordinated. As such, findings will be reported for each organisation separately in this regard.

In Organisation 1, 7 of the debriefers gave responses ranging from "good" to "excellent" when commenting on the way in which the trauma programme was being co-ordinated in their organisation The remaining three debriefers felt that they were not in a position to comment as they were first-time debriefers. Table 63 lists the positive characteristics of the way in which the trauma programme is co-ordinated, as indicated by the debriefers from Organisation 1.

Table 63

Positive trauma programme co-ordination characteristics

Response	n
Effective use of duty roster	3
Supportive trauma programme co-ordination team	3
Training	2
Refresher courses	1
Clear procedures to follow during the debriefing process	2
Referral system	1
Willingness to receive and act on suggestions	1

While the overriding attitude towards the way in which the programme is co-ordinated in Organisation 1 was positive, a number of suggestions for improvement were identified by the debriefers. Three debriefers suggested more frequent contact with other debriefers. Clarity around correct format and procedures applicable to the debriefing follow-up stages was

requested by one debriefer; while another reported that there was a need for better team co-ordination procedures when two or more debriefers are called out to the same robbery. The need to sensitise line management and internal investigators to the issues related to trauma following a bank robbery was noted by two debriefers. One debriefer felt that it was necessary to reconsider the policy of not debriefing security guards even though they were not employed by the bank. Another requested more in-depth training in skills needed to deal with employee's other personal problems that arise in the debriefing process. Lastly, one debriefer complained about head office's insensitivity at opening a branch just 2 ½ hours following a robbery.

In contrast to Organisation 1, the response received from debriefers in Organisation 3 were consistently negative regarding the trauma programme co-ordination in that organisation. Table 64 outlines the issues raised by debriefers in Organisation 3 in this regard.

Table 64

Trauma programme co-ordination : Areas requiring improvement - Organisation 3

Response	n
Discontent with the new debriefing teams system	3
Lack of commitment to trauma debriefing from senior management	5
Need for a supportive full-time co-ordination structure (not 1 person only)	6
Lack of commitment shown by other debriefers	3
Need for better communication and feedback between co-ordinators and debriefers	5
Need to clarify and communicate debriefer roles and procedures	4
Need to better inform branches of the debriefing process and procedures that will occur after a bank robbery	4
Debriefers not available when on duty	1
Being called out when not on duty	2
Need to screen debriefers more carefully to ensure their suitability, availability, and commitment	4
Internal politics and restructuring of the organisation has a negative impact on debriefers	3
Need for more focus on self-care issues in training	2
Need for consistent programme monitoring and evaluation	2

Debriefers from Organisation 2 seemed to equate "trauma programme co-ordination" with the roster system and when six of the debriefers from this organisation responded positively about the way in which the programme was co-ordinated the response was based on the improved roster system. As in the case of Organisation 3, the majority of debriefers identified a number of problems with the trauma programme's co-ordination and expressed these in the form of suggested improvements which are listed in the Table 65.

Table 65

Trauma programme co-ordination : Areas requiring improvement - Organisation 2

Response	n
Debriefers' respomse time to the call-out is too long	1
Need for better communication between the co-ordinator and debriefers	7
Need for more frequent contact with other debriefers to share experiences	4
Training is good but frequent and in-depth training needed	4
Human resources consultants called out too frequently	1
Need for more effective follow-up and monitoring systems for quality control	3
Need for more stringent debriefer selection criteria	3
Manangement in branches need to be educated about the impact of trauma and the procedures tofollow (pertaining to the debriefing process) in the case of robberies	2
Thew value of debriefers needs to be overtly appreciated and recognised	4
Need to providedebriefers with support	3
Need to clarify the follow-up responsibilities of "A" (weekday duties) and "B" (weekend duty) debriefers	2

The following are some of the direct quotations from the debriefers interviewed in Organisation 2 and demonstrate the various points tabled above. "The company must protect the vital resources of debriefers. We aren't anyone's focus and I feel we get taken for granted." (5B). There is no quality control or central point. It's a free-for-all." (10B). "Debriefers are isolated." (2B).

Debriefing the debriefers

Providing support to debriefers following their involvement in a debriefing incident, is a key area in any trauma programme co-ordination strategy. The way in which this is approached and the debriefers' evaluation of the experience, can provide insight into issues

related to the effectiveness of the programme's co-ordination strategies. Considerable differences emerged between the three organisations in this regard.

All 10 debriefers from Organisation 1 were debriefed by a member of the central trauma programme coordination team. In comparison, in Organisation 3, only three debriefers received post-intervention debriefing and this took the form of informal discussions with their colleagues or managers. Similarly, only one debriefer from Organisation 2 received formal debriefing in the form of telephone contact from the co-ordinator. As in the case of Organisation 3, the other debriefers from Organisation 2 also reported more informal debriefing occurring in the form of discussions with their fellow debriefers. One debriefer stated that " Nobody asks how you are - only how the branch staff are." (5B). Another debriefer reported "I would like to talk about it -especially if its been a bad one." (9B).

Those who did receive formal post-intervention debriefing were asked how they found the experience. Nine of the debriefers from Organisation 1 indicated that they found the experience to be positive and useful. For instance, one debriefer remarked that being debriefed is "Always comforting." (3A). The other debriefer from this organisation reported that she preferred to work through the experience on her own. The positive aspects experienced from being debriefed are listed in Table 66.

Table 66

Benefits derived from being debriefed

Response	n
Reassurance that correct approach was followed	1
Good t\ ' able to to share the experience with someone	3
Good to know someone cares	3
Contributions are acknowledged	1
Opportunity to discuss personal problems that were triggered during debriefing	2

A number of debriefers from Organisation 1 indicated that they would prefer face-to-face debriefing rather than the current telephonic format. Five of the debriefers from Organisation 3 indicated that they did not feel that their own debriefing was necessary.

Debriefers were asked whether they did anything else to deal with the debriefing experience, besides being debriefed themselves. The majority (16) reported that they found it helpful to talk about the experience with their partners at home. Three debriefers mentioned that they spoke to their managers and colleagues and another five found it useful to talk to other debriefers. Involvement in activities such as work demands (3), exercise (3), creative pursuits (3), and prayer (2) were also mentioned as being beneficial.

Once again, these findings have considerable implications for trauma programme co-ordination strategies. It would seem that where debriefing the debriefers does occur, people respond positively towards it and would even prefer it to be more personal involving a face-to-face format. In contrast, where debriefing of the debriefers is not done systematically, debriefers generally do not perceive the need for it. Personal coping styles and strategies are also necessary to be taken into consideration when evaluating the role and effectiveness of support systems such as debriefings of the debriefers.

Personal Commitment to Debriefing

Debriefers in this study reported both positive and negative personal and organisational experiences associated with their roles as trauma debriefers. In order to gain a sense of their overriding attitude towards debriefing, perhaps resulting from, and/or, in spite of these experiences, debriefers were asked how they felt about debriefing, generally, and whether they planned to continue in their roles as debriefers.

General view of debriefing

In response to the question regarding how debriefers felt about debriefing, generally, the majority (19) of the debriefers responded very positively to the principle of debriefing, stating that it was a necessity and that they were personally very committed to helping others in this situation. For instance, one debriefer stated that "... debriefing attempts to break the cycle of violence ."(6A). Another stated that "It is the organisation's responsibility to do it [debriefing] - they must practice what they preach!" (2C). Three debriefers felt that it should be extended to include assistance to employees who experience traumas other than just bank robberies. As reflected in the quotations, "It's good to feel that you can make a difference." (7C) and "It's something I can give back to the community." (4B), thirteen debriefers stated that they found debriefing extremely rewarding and that they liked to be able to make a contribution towards helping others. Four debriefers specifically mentioned that they experienced personal growth through the debriefing experience and that they were able to apply their skills to other areas.

Although the overwhelming response was positive, a number of negative responses were received from debriefers in Organisation 3. One debriefer showed his discouragement by stating "We are making a mess of it [debriefing]" (1C). Another complained about the administrative duties (paper work) following a debriefing call-out, and felt that debriefing

conflicts with full-time work responsibilities. A further debriefer stated that the problems with the co-ordination of the trauma programme affected the commitment of active debriefers. Lastly, the latter debriefer also mentioned that he was saddened that the demand for debriefing was so high, reflecting the current wave of violence being experienced in South Africa Similarly, one debriefer from Organisation 2 qualified her positive view of debriefing by stating, "The process definitely works, if it is done properly." (10B).

Commitment to continue debriefing

Lastly, debriefers were asked whether they intended continuing their involvement with the debriefing programme. Apart from two debriefers who had resigned from their organisations and one debriefer who was about to move into a new job within the organisation, all but three debriefers (two from Organisation 2 and one from Organisation 3), expressed their commitment to continuing debriefing.

In conclusion, the trends which have emerged from the interview findings indicate that, in general, debriefers experience a great deal of role satisfaction which is enhanced by effective co-ordination strategies, and which, despite the adoption of an additional work role, does not seem to have long lasting negative work-related or personal consequences.

CHAPTER TEN

Discussion

Overview

In this chapter, the findings from the quantitative and qualitative studies are integrated and discussed within the context of the literature reviewed in Part 1. The focus of the present study is to explore the factors affecting and being affected by the experience of trauma debriefers in the workplace. This study can be seen as an advancement on the conceptual models pertaining to the nature and dynamics of secondary traumatic stress which have been proposed in the current literature (e.g., Beaton & Murphy, 1995; Dutton & Rubinstein, 1995). As such, the present study not only explores the various components identified in these models but extends this investigation to the analysis of the organisational factors that may influence the overall impact of being a debriefer in the work environment. Wherever possible, the findings of the present study are discussed in relation to the literature. However, given the unique focus on the organisational context in the current study, at times there is no documented literature to refer to and this study can therefore be seen as contributing to theory development as well as theory confirmation.

Nadler and Tushman's (1981) congruency model of organisational behaviour is used here in order to provide a framework in which the integration and presentation of the findings can be facilitated. As outlined previously, this model provides a framework for analysing organisational behaviour (of which trauma debriefing is an example) based on systems theory. Accordingly, organisations are seen as being the mechanism that takes inputs (strategy and resources in the context of history and environment) and transforms them into outputs (patterns of individual, group, and organisational behaviour). This model places its greatest emphasis on the transformation process and reflects the critical property of interdependence

between the four components, namely, the task, the individual, the informal organisational arrangements, and the formal organisational arrangements, in the transformation process. Within this framework, indicators of organisational effectiveness are seen as a function of the congruence among the various components. The results which emerged from the quantitative (Phase 2) and qualitative (Phase 3) phases of this study are therefore integrated and discussed under the following headings:

Outputs

The specific outputs considered in this study pertain to the potential experience of secondary traumatic stress. As such, one of the first areas to be discussed is whether the trauma debriefers in this study experienced secondary traumatic stress as measured by indicators of compassion fatigue, burnout, and the silencing response. The indicators of secondary traumatic stress are discussed in conjunction with the findings related to a further output of this study, namely, role satisfaction as indicated by the variable, compassion satisfaction.

Further outcomes focussed on in the present study are the job satisfaction and organisational commitment of trauma debriefers. More specifically, the present study is interested in the potential impact that the experience of being a trauma debriefer in the workplace has on these key organisational behaviours. The findings related to the indicators of secondary traumatic stress and the other outputs in this study are explored throughout the following sections, as the congruence between the various components in the transformation process are discussed in terms of their relative impact on these outcomes.

Task

This section covers characteristics related to the specific activities inherent in the task of debriefing. Following the guidelines suggested by Nadler and Tushman (1981), an

understanding of the debriefing task entails aspects such as the skill demands made in the debriefing situation; the kinds of rewards the debriefing inherently provides to debriefers; the degree of uncertainty associated with the task of debriefing; as well as the specific constraints inherent in debriefing.

The findings from the quantitative and qualitative studies around the impact of the nature of the debriefing incident on the experience of secondary traumatic stress are covered under this heading. Given that the debriefing task is undertaken over-and-above debriefers' other full-time employment commitments, findings regarding role conflict are incorporated in this section. In addition, the results which emerged regarding the experience of role satisfaction are discussed here, as they relate to the inherent nature of the debriefing task.

Individuals

This component of the transformation process is concerned with the nature and characteristics of the individual debriefers. Included here are the issues of demographic characteristics and skills of debriefers. As such, findings regarding the relative impact on the outputs measured of these factors are discussed and include the findings related to exposure to previous work and non-work related trauma. Furthermore, the results which emerged from the exploration of the role of a debriefer's Sense of Coherence are included under this section.

Formal organisational arrangements

This component is concerned with the range of structures, processes, methods and procedures that are explicitly and formally developed to ensure that individuals perform tasks consistent with the organisation's strategy (Nadler & Tushman, 1981). Specific findings related to the trauma programme co-ordination strategies including debriefer selection and training, are discussed here.

Informal organisational arrangements

According to Nadler and Tushman (1981), this component is concerned with implicit organisational arrangements that emerge over time and which may either aid or hinder organisational performance. Included here would be various communication and influence patterns. In the present study, results emerging from the exploration of the relative impact of aspects such as the social support received from key parties and their perceived commitment to the trauma debriefing programme, are discussed in this section.

Outputs

Secondary traumatic stress.

One of the key aims of the present research was to determine whether non-professional trauma debriefers in the workplace experience secondary traumatic stress. This issue was explored in both the quantitative (Phase 2) and qualitative (Phase 3) components of this study. In Phase 2 of the present study, this issue was explored by eliciting debriefers' responses to scales measuring their compassion fatigue, burnout, and the silencing response. In Phase 3 of the present study, debriefers' potential experiences of secondary traumatic stress were elicited from questions exploring their thoughts and feelings during and following the debriefing process; and questions regarding the impact of the debriefing experience on their work, their home lives and world views.

The results obtained in Phase 2 of the present study indicate that, in general, the debriefers in this study did not experience high levels of secondary traumatic stress as reflected in their low mean scores on the measures of compassion fatigue, burnout, and the silencing response. However, one of the limitations of the quantitative phase of the present study is its cross-sectional nature. Debriefers responded to questions based on their general views rather than their responses being elicited, or behaviours monitored, after a controlled

time span, for example, directly after the debriefing experience and 6 weeks later. As such, the qualitative study was specifically designed to complement the quantitative phase in that debriefers were interviewed six weeks following their last debriefing experience. A further point which needs to be noted here is that due to the voluntary nature of participation in the present research, there remains a possibility that those debriefers who chose not to participate in the study may have experienced different (and possibly higher) levels of secondary traumatic stress.

The results obtained in the quantitative study are supported by the interview findings. In line with suggestions in the literature (Beaton & Murphy, 1995; Dutton & Rubinstein, 1995; Figley, 1995a, 1995b) debriefers reported feelings of intense compassion, helplessness, anger, sadness, and personal vulnerability during the debriefing process. Directly following the debriefing incident, a number of debriefers, once again, reported symptoms of secondary traumatic stress as outlined in the literature. For instance, feelings of exhaustion, personal vulnerability, concern for the employees debriefed, depression, and increased sensitivity were recalled by debriefers. These findings are in line with the results of empirical studies conducted by Berah et al., (1984), Talbot et al , (1992), Straker and Moosa (1994), and Sloan et al., (1994). However, none of the debriefers interviewed in the current study reported still experiencing these thoughts and feelings six weeks after the debriefing incident. Instead they indicated that they lasted for between 1 and 7 days following the first day's debriefing call-out and therefore are clearly secondary traumatic stress reactions but can not be considered indicators of secondary traumatic stress disorder.

In order to explore the potential personal impact of debriefing on the debriefers further, they were asked to recall how the last debriefing incident affected their home and work lives Some debriefers reported that they were able to separate the debriefing experience

from their home lives. However, the majority of debriefers recalled experiences in line with the symptoms of secondary traumatic stress referred to in the literature. As such, on reflection of how the debriefing experience affected their home lives, a number of debriefers reported discussing the experience with their partners or family members while a number recalled feeling worried about the people they had debriefed that day. Feelings of tiredness, and increased emotional arousal were also reported as being experienced at home following involvement in the debriefing process. In addition, some debriefers stated that they dreamt about the incident and reflected on personal issues in their own lives as a result of the debriefing experience. The need to be more vigilant about their own and their families' safety was raised by a number of debriefers. Once again, these thoughts, feelings and behaviours were reported as lasting for between 1 and 7 days following the debriefing incident and were not still being experienced at the time of the interview.

With reference to the impact of the debriefing experience on debriefers' work, the majority of debriefers interviewed reported that there was no negative impact on their work as they were able to re-schedule their work commitments and complete their work responsibilities in their own time. Only a small number of debriefers reported lapses in their concentration at work directly following a debriefing incident. Similarly, only a few debriefers specifically reported the need for time to gain control of their emotions before being able to apply themselves to their work. However, when considering the latter findings it should be emphasised that a number of debriefers interviewed did not return directly to work after debriefing due to the logistical characteristics of the bank robbery.

Therefore, the results from the quantitative and qualitative phases of the present study clearly indicate that, while a number of the symptoms of secondary traumatic stress were experienced by debriefers, these were not long lasting and not at the levels indicating the need

for clinical intervention. This may account for the burnout and compassion fatigue scores of debriefers in the present study, in general, falling into the very low risk range at the time the quantitative study was conducted. These findings are in line with those reported by Chrestman (1995) who found that while exposure to trauma was associated with increased symptoms of intrusion and avoidance among trauma therapists, the incidence of symptoms did not, on average, fall within the clinical range.

One of the factors that Chrestman (1995) found to account for this finding was that participating in a variety of activities rather than engaging in full-time trauma counselling was important in reducing the potential deleterious impact of trauma work. In the present study, debriefers adopted their debriefing responsibilities over-and-above their other full-time work commitments, and therefore, in line with Chrestman's findings, this combination of different work roles may, in fact, have played a key constructive part in the prevention of the development of secondary traumatic stress disorder. Another factor which is of relevance here, is the procedural rule pertaining to the frequency of debriefer call-outs. Accordingly, debriefers in this study, are officially only to be required to respond to a debriefing call-out once a month (Friedman, 1997) thereby controlling debriefers' exposure to traumatic material.

These findings are in line with Figley's (1995c) conceptualisation of the development of compassion fatigue. Compassion fatigue, or secondary traumatic stress disorder, results from prolonged exposure to traumatic stress and the ensuing traumatic recollections provoked by this exposure. Thus, the periodic exposure to traumatic material experienced by the debriefers in this study may well have made a significant contribution to the relatively low levels of secondary traumatic stress experienced by this sample of debriefers, in general. The potential benefits of limiting debriefers' exposure to traumatic material in the form of debriefing incidents, was also highlighted by Stamm and Pearce (1995). A combination of

work activities, as experienced by the debriefers in the present study and reinforced in the work of Chrestman (1995), may therefore play a critical role in the prevention of the onset of compassion fatigue resulting from prolonged exposure to traumatic material.

Another potential consequence of exposure to traumatic material in the trauma debriefing context, is the disruption to counsellor's cognitive schemas about self and the world, as conceptualised by Janoff-Bulman (1992) and McCann and Pearlman (1990). This characteristic of secondary traumatic stress was not explicitly measured in the quantitative phase of the present study. However, it was explored in the focussed interviews in that debriefers were asked whether the debriefing experience had resulted in them re-evaluating their views about life.

In accordance with the ideas and findings of McCann and Pearlman (1990), debriefers in the present study reported changes to their cognitive schemata concerning their world view, spirituality, affect tolerance and interpersonal relationships. More specifically, debriefers reported being sensitised to the suffering of others as well as becoming more aware of their own and their loved one's vulnerability. The heightened awareness of the importance of family and other key relationships was reported, together with the need to appreciate life more due to its transitory nature. In support of the contentions made by Rosenbloom et al., (1995), debriefers in the present study indicated that, while these beliefs and attitudes were triggered by their involvement in the debriefing process, they were still held at the time of the interviews indicating a more permanent change in the way debriefers think and feel about themselves, the world, and others. Furthermore, as suggested by Pearlman (1995), shifts in cognitive schemata following exposure to traumatic material, may well be considered positive. A number of the comments made by the debriefers interviewed clearly demonstrate a form of personal growth and a deeper connection with individuals and the human experience

culminating in a greater awareness of all aspects of life, as described by Pearlman (1995).

The findings regarding debriefers' own feelings of vulnerability and the need for increased vigilance should be seen within the context of the heightened levels of criminal violence currently being experienced in South Africa. As such, in agreement with the contentions of Chrestman (1995), trauma debriefers who reported the need to make increased efforts to protect themselves and their families, may well represent an awareness of real danger rather than phobic avoidance behaviours.

The findings from the present study regarding the manifestations of secondary traumatic stress in the short term, seem to concur with those of Koopman et al., (1995) and the concept of Acute Stress Disorder (ASD). Clearly, debriefers reported experiencing some of the symptoms associated with ASD when they reported in the interviews experiences which can be seen to be related to the relevant conditions associated with ASD, namely, anxiety symptoms, dissociative behaviours, re-experiencing the traumatic material, and avoidance behaviours (APA, 1994). In accordance with one of the other criteria related to ASD, debriefers reported experiencing these symptoms for between 1 and 7 days. However, one of the fundamental criteria of ASD pertains to symptoms markedly interfering with social or occupational functioning (APA, 1994). This last, and fundamental criterion of ASD diagnosis, was certainly not evident in the responses of debriefers in the current study. However, future research in this area would do well to investigate the incidence of ASD in trauma debriefers explicitly and as such tailor the research design adopted specifically to accommodate the exploration of the potential experience of ASD symptoms.

The above discussion of the present study's findings, therefore, indicates that involvement in the debriefing process has a considerable personal impact on the debriefers. However, while this seems to have resulted in a number of long term changes to some of their

cognitive schemata, the other symptoms of secondary traumatic stress reported were experienced in the short term and were not of the severity that would indicate the incidence of secondary traumatic stress disorder, or (secondary) Acute Stress Disorder.

As indicated in the literature review, the concept of secondary traumatic stress is in its infancy in terms of its conceptualisation and operationalisation. In the present study, secondary traumatic stress was operationalised by including three measures indicating different aspects of the [illegible] secondary traumatic stress that may result from trauma counselling. While these [illegible] traumatic stress are clearly related, the findings of the present study (as discussed [illegible]) show that there is a marked difference between these constructs in terms of the factors affecting and being affected by them, thereby alluding to the complex nature of secondary traumatic stress as potentially experienced by trauma counsellors.

What is of clear interest from these findings is not merely the experience, or lack thereof, of secondary traumatic stress by trauma debriefers, but rather the factors affecting the present study's results in this regard. These factors will be explored in the subsequent sections of this chapter which focus on the interaction between the sub-components forming the core transformation component of the congruence model of organisational behaviour being used as a framework in the present study.

Compassion satisfaction.

While the majority of the literature about the impact of exposure to traumatic material within the helping context focusses on the potential harmful consequences of this type of work, a number of authors in the field have recently also highlighted the positive consequences. For instance, Hodgkinson and Shepherd (1994) reported that 85% of their sample of social workers involved in disaster support work, stated that they benefited from

their involvement and the effect of this type of work was therefore not uniformly negative. Similarly, positive consequences of trauma counselling were reported by Kassam-Adams (1995) and have been documented in the works of Stamm (1995) and Yassen (1995). As such, this aspect of the experience of debriefers in the workplace was explicitly explored in both the quantitative and qualitative phases of the present study.

The findings from the compassion satisfaction sub-scale used in Phase 2 of the present study, indicated that, in general, debriefers experienced a considerable degree of satisfaction from their debriefing responsibilities. This finding was supported by the trends which emerged from the interview data. In the interviews, the majority of debriefers reported very positive attitudes towards the principle of trauma debriefing in the work environment, stating that it was a necessity in the current South African context. Similarly, the majority of debriefers interviewed stated explicitly that they found debriefing extremely rewarding and that they liked being in a position to help others. Other debriefers mentioned the positive spin-offs associated with personal growth and the acquisition of skills that can be applied in other areas. The few negative comments received in this regard, seemed to be related to the manner in which the trauma programme was being co-ordinated rather than to the inherent nature of the debriefing task.

As a further indication of the positive consequences associated with this type of work, debriefers were asked in their interviews whether they were planning to continue in their roles as debriefers. Apart from the few debriefers who had resigned from their organisations, the overwhelming response was positive in that, with the exception of one debriefer, they all expressed their commitment to continue debriefing. The person who had decided to withdraw from the debriefing process reported that this was directly as a result of problems experienced in the management of the debriefing programme and the resulting insecurity of the

organisational re-structuring that was occurring. This debriefer did, however, state that he would continue being involved in this type of work by continuing to offer counselling assistance in community organisations to which he was associated.

Once again, the more interesting and useful consideration in this regard, is not merely whether debriefers experience satisfaction in their debriefing roles, but rather an exploration of the contributing factors to this outcome. The findings in this regard will be discussed as the results of of the present study are explored further.

Work attitudes.

The focus in the present study was not directly to determine workplace trauma debriefers' levels of job satisfaction and organisational commitment. Instead, the intention was to explore the potential impact of the debriefing experience on key work attitudes such as job satisfaction and organisational commitment The relationship between these work attitudes and the specific aspects of the debriefers' experiences are integrated into the relevant discussions when focussing on the specific components of the transformation process. However, more general results pertaining to these work attitudes are outlined here.

The combined workplace experience of trauma debriefers in the present study, as manifested in the total score of the WTDS(R), was found to have a statistically strong positive relationship on both the job satisfaction and organisational commitment scores of debriefers across all the organisational sub-samples with the exception of those in Organisation 1. Thus, the more positive these debriefing workplace experiences were evaluated, the higher was the debriefers' reported job satisfaction and organisational commitment.

In order to explore the relationship between the experiences of trauma debriefers in the workplace and key organisational outcomes further, the relationship between the secondary traumatic stress indicators and job satisfaction and organisational commitment was

investigated in Phase 2 of the present study. A number of statistically significant (weak to moderate) relationships were found between these variables but only burnout emerged as a statistically significant contributor to the variance in the job satisfaction scores of debriefers when considering the total sample and Organisation 2 separately. Even fewer statistically significant results emerged when focussing on the relationship between the secondary traumatic stress indicators and organisational commitment which was confirmed in the multiple regression findings as none of the indicators of secondary traumatic stress were found to be statistically significant predictors of the variance in debriefers' organisational commitment scores.

Sense of Coherence was found to be statistically significantly correlated with the perceived job satisfaction and organisational commitment of debriefers in the present study. Moreover, Sense of Coherence was not found to be a consistent moderator between the workplace experiences of these debriefers (as measured in the WTDS(R)) and these work attitudes. In a recent article, Strümpfer et al., (1998) report similar findings in their exploration of the relationship between Sense of Coherence and one of the work attitudes focussed on in the present study, namely, job satisfaction. Accordingly, Strümpfer et al., highlight the strong likelihood of a bidirectional relationship between Sense of Coherence and job satisfaction and argue that "personality dispositions and various components of job satisfaction ought to be seen as co-producers and products in synergistic interaction." (1998, p.99).

The findings related to job satisfaction in the current study would seem to confirm Strümpfer et al.,'s contentions that numerous complex relationships and interactions come into play when measuring a person's perceived job satisfaction (1998). Factors related to the measurement of this construct, the variety of aspects related to the job as well as the complex

collection of affective and cognitive responses to these various components of the job, all contribute to the complexity of the relationships between job satisfaction and other variables of research interest (Strümpfer et al., 1998). The present researcher would argue that this observation can also be extended to the current study's findings concerning organisational commitment.

Task

As discussed previously, this section covers characteristics related to the specific activities inherent in the debriefing task. As such, the focus here is on the findings related to aspects such as: the skill demands made in the debriefing situation; the kinds of rewards the debriefing inherently provides to debriefers; the degree of uncertainty associated with the task of debriefing; as well as the specific constraints inherent in debriefing.

More specifically, findings from both the quantitative and qualitative studies concerning the impact of the nature of the debriefing incident on the experience of secondary traumatic stress are discussed here. A discussion of the findings regarding role conflict is incorporated in this section as debriefers in the present study adopt their debriefing responsibilities over-and-above their full-time employment demands. Finally, the results which emerged regarding the experience of self-efficacy are discussed here as they can be seen as relating to the inherent nature of the debriefing task.

Nature of the task.

Numerous authors in the field of secondary traumatic stress (for example, Dutton & Rubinstein, 1995; Kassam-Adams, 1995) emphasise the importance of considering the nature of the traumatic material the trauma workers are exposed to when exploring the incidence and nature of secondary traumatic stress. The impact of the specific nature of the debriefing incident on the experience of secondary traumatic stress was directly investigated in the

quantitative component of the present study. Accordingly, the effect of having debriefed in an incident where a death and/or serious injury had occurred formed the focus of one aspect of Phase 2 of the present study. Contrary to indications in the literature, debriefers who debriefed in an incident where a death had occurred (n = 38) did not differ from their counterparts on any of their scores on the indicators of secondary traumatic stress. Similarly, no statistically significant differences on these indicators were found between debriefers who debriefed employees in incidents where there had been serious injury (n = 41).

In Phase 3 of the present study, only one debriefer reported reactions related to a debriefing experience involving a death. The majority of the other debriefers interviewed were involved in debriefing incidents linked to robberies characterised by verbal abuse and only minor physical injuries. A small number of debriefers explicitly reported feelings of relief that there were no serious injuries or deaths during the debriefing process. Also, some debriefers stated that, while they were satisfied with their debriefing performance in a particular incident, they questioned how they would be able to cope in situations involving deaths and/or serious injury. Thus, even though no statistically significant differences in the experience of secondary traumatic stress were found between debriefers as a result of the nature of the incident in Phase 2 of the present study, in the interviews debriefers clearly indicated that involvement in a debriefing exercise where more serious physical injuries occurred, may well alter their reaction to involvement in the debriefing process, in general. Clearly, this is an area requiring further investigation before any firm conclusions can be made.

Role conflict.

A unique characteristic of the sample of trauma helpers in the present study, is the fact that they are required to fulfil their debriefing responsibilities over-and-above their full-time work commitments. This dual set of role responsibilities is therefore a unique and critically

important aspect of the debriefing experience and has the potential for role conflict to result. Beaton and Murphy (1995) highlight role conflict and ambiguity as two of the organisational factors which may have an influence on the recognition of, and recovery from, work induced trauma. Similarly, in an empirical study undertaken by Hodgkinson and Shepherd (1994), role problems were found to be significant predictors of psychological symptoms amongst their sample of social workers involved in trauma work.

In the current study, aspects related to role conflict were measured in items forming part of the Programme Co-ordination (Factor 1) component of the WTDS(R). More specifically these items elicited debriefers' responses concerning the perceived clarity of the procedures and processes to be followed in the debriefing context. Programme Co-ordination emerged as being consistently inversely related to the compassion fatigue scores of debriefers when considering the total sample as well as across the three organisational sub-samples. Furthermore, Programme Co-ordination (Factor 1) was consistently found to be statistically significantly related to the burnout and the silencing response scores of debriefers in the total sample and those in Organisation 3.

The potential impact of role conflict (in terms of combining the debriefing responsibilities with those of debriefers' full-time employment responsibilities), on the experience of secondary traumatic stress was more directly ascertained from the data which emerged from the interviews. The majority of debriefers interviewed seemed to indicate that they could separate the demands made on them in the two roles, namely debriefing and their full-time designation. This can be inferred from the finding that the majority of debriefers reported that debriefing had no long-term negative impact on their work as they were able to reschedule their work commitments and complete their work activities in their own time. It would, therefore, seem that debriefers in the present study were able to deal effectively with

their full-time work commitments and the additional responsibilities entailed in debriefing, thereby indicating the absence of role conflict. This, in turn, may once again have contributed to the low levels of secondary traumatic stress reportedly experienced by the debriefers in the present study.

Hence, contrary to expectation, the combination of debriefing activities and full-time work responsibilities was not found to be problematic for the debriefers in the present study. Indeed, this combination of work roles seemed to play a significant part in the low levels of secondary traumatic stress reported, on average, by the debriefers in this study in that the over-exposure to traumatic material was thereby prevented. However, it is essential to consider these results within the inherent limitations associated with the cross-sectional research design of this study, as well as the voluntary nature of debriefer participation in the current study. The possibility that debriefers who experienced considerable role conflict chose not to participate in this study or who had already withdrawn from the trauma programme at the time this study was conducted, cannot be ruled out completely. Future studies in this area would do well to adopt a longitudinal research design, so as to be able to arrive at more conclusive results regarding this issue.

Skill demands and self-efficacy.

Another important and related aspect to consider when exploring the debriefing task and the experiences reported by debriefers, is the skill demands made on debriefers in the debriefing context. In Phase 3 of the present study, debriefers were asked to reflect on their performance in their last debriefing call-out. Generally, debriefers reported feeling satisfied with their performance and effectiveness in that situation. The majority of debriefers felt satisfied with their ability to deal effectively with the traumatic material they were being exposed to. However, although debriefers expressed perceptions of general self-efficacy, they

still recalled a number of factors which caused them some difficulty in the debriefing process. These ranged from employee reactions such as guilt and resistance, to debriefer characteristics such as inexperience and to practical co-ordination problems such as insufficient call-out details.

The findings related to the self-efficacy expressed by the debriefers in the interviews complement the results which emerged from the quantitative phase of the present study. Self-efficacy, as measured in Factor 2 of the WTDS(R), was found to be inversely related to all three of the indicators of secondary traumatic stress (compassion fatigue, burnout and the silencing response) when considering the total sample. In addition, Self-efficacy (Factor 2) was found to be significantly inversely related to these indicators of secondary traumatic stress when each of the three organisations were considered separately. The only instances where this finding was not consistent was when considering the relationship between Self-efficacy and compassion fatigue for Organisations 1 and 2; and the relationship between Self-efficacy (Factor 2) and the silencing response for Organisation 2.

The relative contribution that Self-efficacy made to the potential experience of secondary traumatic stress was most evident in the consistently statistically significant inverse relationships which emerged between Self-efficacy and burnout and Self-efficacy and the silencing response, in particular. Furthermore, the relative contribution that Self-efficacy made to the indicators of secondary traumatic stress was once again highlighted in the results of the stepwise regressions computed. Self-efficacy (Factor 2), emerged as the strongest predictor of the variance in the burnout and silencing response scores across all the sub-samples, with the exception of the silencing response outcomes reported for Organisation 2. Furthermore, Self-efficacy (Factor 2) was found to be the sole statistically significant contributor to the variance in the compassion fatigue scores of debriefers in Organisation 3.

As explained previously, items forming Factor 2 (Self-efficacy) of the WTDS(R) include those related to debriefers' perceptions of the effectiveness of the debriefer training course in terms of skills enhancement, as well as items related to debriefers' perceptions of their effectiveness as debriefers. The above findings, therefore, highlight the critical importance of debriefers' sense of achievement and mastery in their debriefing activities. This in turn, has implications for the ongoing upgrading of debriefers' skills and knowledge relevant to trauma and its impact. Not only does perceived self-efficacy have a strong impact on the experience, or lack thereof, of secondary traumatic stress, the following findings emphasise the importance of perceived self-efficacy in the satisfaction associated with trauma work.

When considering the positive aspect of debriefing work as operationalised in the measurement of compassion satisfaction, Self-efficacy also emerged as a most important influence. Accordingly, Self-efficacy (Factor 2) was found to be statistically significantly correlated with debriefers' compassion satisfaction scores when considering the total sample and Organisations 1 and 3. The results of the stepwise regressions indicated that Self-efficacy was the most significant predictor of the variance in the compassion satisfaction scores of debriefers across all three organisations. It is important to note, however, that while the Self-efficacy component of the WTDS(R) and compassion satisfaction scores were found to be strongly related, the strength of the correlations did not indicate that these variables were measuring exactly the same aspects related to debriefers' experiences. On inspection of the items comprising these two constructs, it would seem that compassion satisfaction refers to role satisfaction inherent in the task of trauma counselling, in general; while Self-efficacy, more specifically, includes issues related to both role satisfaction and debriefers' self-evaluations of their perceived capabilities and effectiveness in this role. Therefore, it would seem that debriefers' perceived self-efficacy in their roles as debriefers is a significant contributor to their

overall levels of role satisfaction experienced in the debriefing context.

These findings, once again, provide strong empirical support for Figley's conceptual model of trauma transmission. In this model, Figley (1995c) contends that the helper's appraisal of his/her empathic response in terms of low or high sense of achievement, coupled with the helper's ability to disengage from the helping relationship determines the helper's extent of developing compassion stress. In order to illustrate the link between this model and the findings in the current study, the core components of the trauma transmission model (Figley, 1995c) will be dealt with in more detail. According to Figley (1995c) empathic response refers to the extent to which the helper makes an effort to reduce the suffering of the victim and is affected by both the helper's empathic ability and susceptibility to emotional contagion (experiencing the feelings of the sufferer as a function of the exposure to the sufferer). A helper's sense of achievement in this regard refers to the extent to which the helper is satisfied with his/her efforts, while disengagement refers to the helper's ability to distance himself or herself from the ongoing suffering of the victim. (Figley, 1995c).

Self-efficacy, as measured in Factor 2 of the WTDS(R) in the present study, comprises items concerning debriefers' perceptions regarding : the effectiveness of the skills training they received; their possession of the right qualities required for debriefing; the extent to which debriefing demands are within their capabilities; and the inherent value of being in a position to help others. These perceptions may well be considered as facets of the sense of achievement referred to in Figley's trauma transmission model. This, in conjunction with the present study's findings regarding the debriefers' abilities to, in general, be able to disengage from the debriefing experience, may therefore account for the low levels of secondary traumatic stress reportedly experienced by debriefers, in general, in this study. Similarly, the combination of these factors (perceived self-efficacy and the ability to disengage from the helping experience)

may well account for the relatively high levels of compassion satisfaction reported by these debriefers.

These findings can also be viewed as supporting the contentions made by Stamm and Pearce (1995) regarding the role of perceived competency and control in the trauma counselling context. Accordingly, when helpers in this context feel that they are prepared and have the ability to act effectively during an event, there will be a better outcome, for instance, lower scores on indicators of secondary traumatic stress.

Turning to the other outcomes measured in this study, namely job satisfaction and organisational commitment, Self-efficacy (Factor 2), as measured in the WTDS(R), was found to have a statistically strong significant relationship with job satisfaction. This was particularly evident in the findings related to debriefers in Organisation 2 and 3. Moreover, in the stepwise regressions, Self-efficacy (Factor 2) was found to have a statistically significant impact on the variance in the job satisfaction scores of debriefers in these two organisational sub-samples. However, a statistically significant relationship between Self-efficacy (Factor 2) and job satisfaction was not found for debriefers in Organisation 1. When focussing on debriefers in Organisations 2 and 3, these results may be seen to represent a spill-over effect between debriefers' positive evaluations of their competency in their debriefer roles, and their perceived satisfaction with their jobs in general. The results pertaining to debriefers in Organisation 1 seem to indicate that debriefers in this organisation viewed these two domains as separate from each other.

The present study's findings related to organisational commitment, highlight a similar trend to that of the findings for job satisfaction. Self-efficacy (Factor 2) was found to have a statistically significant but moderate relationship with organisational commitment for debriefers in Organisations 2 and 3. However, this component of the WTDS(R) did not emerge as a

statistically significant variable in the stepwise regressions and no statistically significant relationship was found between Self-efficacy and organisational commitment for debriefers in Organisation 1.

The results relating to the relationship between Self-efficacy and the work attitudes measured in this study clearly demonstrate the subtle differences between debriefers in the three organisational settings and serve to emphasise the organisation-specific contexts in which these debriefers work. The results pertaining to debriefers in Organisation 1 did not approach statistical significance, while those for debriefers in the two other organisational sub-samples showed a relatively strong relationship between Self-efficacy and organisational commitment, and an even stronger one between job satisfaction and this aspect of workplace trauma debriefers' experiences. A general explanation of these differing results can be found within the contentions made by Strümpfer et al., (1998) referred to earlier. Strümpfer et al., (1998) emphasise that numerous complex relationships and interactions come into play when measuring a person's perceived job satisfaction. The present researcher would extend this observation to a person's perceived organisational commitment. As such, factors related to the measurement of these constructs, the variety of components related to the job and the organisation, together with the complex collection of cognitive and affective responses to these various components of the job and the organisation, all contribute to the complexity of the relationships between these work attitudes and other variables of research interest (Strümpfer et al., 1998).

Individual

This component of the transformation process is concerned with the nature and characteristics of the individual debriefers. As such, factors such as the demographic characteristics and skills of debriefers are focussed on in terms of their relative impact on the

outputs measured in this study. In addition, the findings related to debriefers' exposure to previous work and non-work related trauma are discussed. Finally, the results which emerged from the exploration of the role of a debriefer's Sense of Coherence are discussed under this section.

Demographic factors.

The relationship between the demographic characteristics of the debriefers, and the scores on the indicators of secondary traumatic stress were investigated in Phase 2 of the present study. No statistically significant relationships emerged between the indicators of secondary traumatic stress and debriefers' age, length of service, and number of children. Similarly, potential differences in the indicators of secondary traumatic stress across biographical variables such as gender, home language, marital status, education level, position in the organisation, and geographic region were explored. The only statistically significant result to emerge in these analyses was between the compassion fatigue scores of English and Afrikaans speakers with Afrikaans speakers scoring statistically significantly higher on the compassion fatigue scale. However, as in the case of the other home language groups, the compassion fatigue scores of Afrikaans speaking debriefers, in general, still fell within the low risk range of scores.

Some difficulty is experienced in relating these findings to other empirical studies reported in the literature. This is due to the fact that the few published empirical studies in the area of secondary traumatic stress as applied to trauma workers in the counselling context, do not explicitly report on their findings related to the biographical details of their subjects. One exception, is Kassam-Adams who reported finding female psychotherapists involved in trauma work scored significantly higher than their male counterparts on levels of PTSD symptoms. No gender differences emerged in the present study. Perhaps it can be inferred that in

accordance with the findings in the present study, other studies in this area did not find statistically significant differences on indicators of secondary traumatic stress along demographic characteristics of their samples. Clearly, there is a need for future studies in this area to explicitly report their findings in this regard. Despite the lack of published findings related to the role of demographic factors in the experience of secondary traumatic stress, the results of the present study provide a strong indication that the experience of secondary traumatic stress is not determined by the demographic characteristics of the trauma debriefers.

Previous exposure to trauma.

One personal characteristic of trauma workers in this field that has repeatedly been emphasised as playing a key role in their experience of secondary traumatic stress, is trauma workers' prior exposure to traumatic incidents (Beaton & Murphy, 1995; Dutton & Rubinstein, 1995; Figley, 1995c; Hodgkinson & Shepherd, 1994). This dimension was therefore explored in the current study in that the potential impact on the experience of secondary traumatic stress of previous exposure to both work and non-work related trauma was explicitly investigated in the quantitative phase.

Previous exposure to work related traumatic material was operationalised by eliciting information on the length of time a debriefer had been operating as a debriefer in that organisation; the total number of employees a person had debriefed; and the time lapse since the person was last involved in a debriefing incident. Correlations were computed to determine the relationship between these variables and the indicators of secondary traumatic stress. For the total sample the only statistically significant relationship to emerge in this regard was between compassion fatigue and the time lapse since the person was last involved in a debriefing. This finding seems to support the temporal nature of the experience of secondary traumatic stress in the current sample of debriefers. It also formed one of the key reasons for the design of the qualitative phase of the present study in that all debriefers

interviewed had been involved in a debriefing incident 6 weeks previously.

Compassion satisfaction was found to be statistically significantly related to the length of time a person had been operating as a debriefer and the total number of employees a person had debriefed when considering Organisation 3 separately. Debriefers in Organisation 3 were found to have been involved in debriefing for a statistically significant longer period of time than those in Organisations 1 and 2. Similarly, debriefers in Organisation 3 emerged as having debriefed a statistically significant greater total number of employees than their counterparts in the other two organisations. These findings would seem to support the contention that experience has a positive impact on the consequences of involvement in trauma work (Beaton & Murphy, 1 95). However, the small sample size for Organisation 3 should be taken into consideration when interpreting these results as well as the fact that this was not a trend which emerged across the other sub-samples in the present study.

The relationship between previous exposure to work-related trauma and the work attitudes of job satisfaction and organisational commitment was also investigated. When considering the total sample of debriefers a statistically significant weak inverse relationship was found between job satisfaction and the total number of people a person had debriefed. This finding, albeit statistically stronger, was repeated for debriefers in Organisation 3 but not for debriefers in the two other organisational sub-samples. A similar pattern emerged in the findings related to organisational commitment. Accordingly, organisational commitment was found to be inversely related to the total number of people a person had debriefed when focussing on the total sample as well as Organisation 1 and 2 sub-samples.

Therefore, it would seem that the more a debriefer is exposed to debriefing situations the greater is the negative impact on their work attitudes as manifested in their reports of job satisfaction and organisational commitment. This finding could be interpreted in line with

some of the cognitive schemata shifts which were identified in the interview phase of the present study. For instance, a number of debriefers reported questioning their beliefs about people and organisations following their involvement in a debriefing incident. In addition, some debriefers from Organisation 3 specifically reported that their involvement with the debriefing programme had reinforced their perception that top management does not care about its staff. However, these remarks and those findings from the quantitative phase of this study, should be considered within the overall finding of the interviews in this regard, namely, that the majority of debriefers interviewed considered their respective organisations in a more positive light as a result of their involvement in the debriefing process. Also, while significant relationships did emerge from the quantitative phase of this study, it is essential to note that this does not imply causality. Strümpfer et al.,'s (1998) comments regarding the complexity of factors contributing to a person's perceptions of job satisfaction and organisational commitment, as discussed previously, are also appropriate here. These seemingly contradictory findings from the two phases of this study indicate the need for further research before being able to arrive at any firm conclusion regarding the impact of the length of exposure to workplace debriefing on significant work attitudes.

The potential relationship between trauma debriefers' previous exposure to non-work related trauma and their current experience of secondary traumatic stress was investigated by exploring the relationships between debriefers' scores on the Traumatic Stress Schedule (Norris, 1990) and the indicators of secondary traumatic stress. No statistically significant relationships emerged between these factors. The potential impact of prior personal exposure to traumatic material was further explored by considering debriefers' responses to each of the items on the Traumatic Stress Schedule. When considering each item on this scale as a categorical variable, results showed that debriefers who reported having lost a loved one in an

accident, homicide, or suicide scored statistically significantly higher on the compassion fatigue scale than their counterparts. This result lends support to writers in this field (Beaton & Murphy, 1995; Dutton & Rubinstein, 1995; Figley, 1995c; McCann & Pearlman, 1990) who highlight the potentially deleterious role of personal vulnerabilities in the trauma counselling process.

However, different findings emerged when focussing on the burnout scores of debriefers in the present study. In this case, debriefers who reported having been sexually abused were found to have lower burnout scores than their counterparts. This finding may well provide support for those of McMillen et al., (1995) and McMillen et al., (1997) who indicated that previous exposure to personal traumatic incidents may increase one's resiliency. These results and the aforementioned ones in this regard, certainly do support the contention that the nature of the traumatic material a person is exposed to has differing consequences. There may be some perceived benefits in the form of increasing an individual's resiliency and ability to cope when faced with other traumatic material. On the other hand, prior exposure to trauma may result in increased personal vulnerability to the potentially deleterious impact of trauma work. However, it is important to note that when considering these perspectives, debriefers in the present study who reported experiencing these two forms of personal trauma still reported scores of compassion fatigue and burnout falling in the low risk range.

Personality disposition: Sense of Coherence

Writers in the field of trauma, in general, and secondary traumatic stress in particular, repeatedly allude to the role of cognitive appraisal and personality disposition in an individual's reaction to exposure to traumatic material. For instance, Kleber and Brom (1992), in line with writers in the field of stress in general (for example, Folkman & Lazarus, 1984), specifically argue against the notion of a linear relationship between the stress factor and the stress

reaction. Instead, these authors, and many others in the field (for example, Green et al., 1985), advocate that the concept of 'attribution of meaning' is at the core of the process of the relationship between a traumatic event and the possible consequences. Roskies et al., (1993) extend this argument further and ·opose that dispositional traits can strongly influence the role of appraisal in the experience of stress. Inconsistent results have emerged from empirical studies in which the role of personality disposition in the reaction to exposure to traumatic material has been explored (e.g., Arsenault et al., 1991; McFarlane, 1988, 1989; Moran & Briton , 1994). However, studies in this area have operationalised personality disposition in varying ways (for instance, locus of control, negative affectivity, and hardiness) which may partly account for the inconsistency in the results which have emerged in this field. As a result, personality disposition remains an important variable to consider in any studies focussing on the nature and dynamics of traumatic stress in general, and secondary traumatic stress, in particular.

Authors in the field of psychotraumatology have recently focussed on the potential role of Antonovsky's concept of Sense of Coherence in explaining the dynamic nature of the people's differing reactions to traumatic events. While the theoretical conceptualisation of the role of Sense of Coherence in the reaction of people's exposure to traumatic material would seem to be sound, few empirical studies have been conducted in this regard. The present study, therefore, specifically explored the role of Sense of Coherence in the experience of workplace trauma debriefers. As shown in the literature reviewed in the present study, considerable confusion exists concerning the precise nature of the role that personality disposition plays in a person's reactions to exposure to traumatic material. Based on the contentions of Baron and Kenny (1986) the present study specifically investigated the potential moderating and main effects role of Sense of Coherence in the quantitative phase of

the study.

In line with the findings of other researchers in the area (Flannery & Flannery, 1990; McSherry & Holm, 1994; Virtue & Jansen, 1996), in the present study strong statistically significant inverse relationships emerged between Sense of Coherence and its sub-scales, and the indicators of secondary traumatic stress, namely, burnout and compassion fatigue. More moderate, but still statistically significant, relationships were found between the silencing response and Sense of Coherence and its sub-scales. In addition, strong statistically positive relationships were found between Sense of Coherence and its sub-components and compassion satisfaction. The latter finding is once again in line with those of other researchers such as Virtue and Jansen who found statistically positive correlations between Sense of Coherence and general psychological well-being.

The relative and differing impact of the various components of Sense of Coherence on the scores of the indicators of secondary traumatic stress emerged from the results of the stepwise regressions. Although Antonovsky (1993) explicitly warned researchers against focussing on the separate components of the Sense of Coherence due to lack of demonstrated construct differentiation between these three components of Sense of Coherence as measured in the Orientation to Life Questionnaire, the current researcher, in line with others in the field, did explore the relative influence of these variables. This approach was adopted due to the theoretical nature of the three components of Sense of Coherence which are of specific interest in the exploration and understanding of the nature and dynamics of workplace trauma debriefers. Nevertheless, present study's findings in this regard should be viewed with Antonovsky's words of caution in mind.

The Sense of Coherence sub-scales, Manageability and Comprehensibility, were found to account for 32% of the variance in debriefers' compassion fatigue scores, with

Manageability emerging as having the greatest influence (29%). According to Antonovsky (1979), Manageability refers to a person's perception of the availability of adequate resources including those which are under the person's own control as well as those under the control of others and, as such refers to the sense that one will be able to cope with desirable and undesirable life events. The relatively strong influence of Manageability on the variance in the compassion fatigue scores would complement the other findings in this study regarding debriefers' positive evaluations of their self-efficacy in the trauma debriefing process. These results seen together provide strong support for the contention that debriefers in the current study feel they have the adequate personal qualities, as well as the appropriate skills imparted in the debriefing training course, to deal effectively with the demands made in the debriefing process. It would seem that this sense of perceived control in the debriefing situation is a strong mitigator against the potential harmful consequences of being exposed to traumatic material, as manifested in compassion fatigue.

The findings regarding Comprehensibility can also be meaningfully interpreted when one considers the results regarding the nature of the bank robberies. Comprehensibility, refers to the extent to which the person perceives internal and external stimuli as clear, ordered, structured and consistent information (Antonovsky, 1979). In the quantitative study phase of the present study, no significant differences were found on the indicators of secondary traumatic stress based on the nature of the bank robberies (namely, the occurrence of death and/or serious injury). Similarly, in the interviews only one debriefer was involved in an incident where a death had occurred and a number of debriefers explicitly mentioned not being sure of how well they would be able to cope in a debriefing session where there had been death involved in the bank robbery. Also, it must be remembered that the incidence of violent crime is becoming an every day occurrence in South Africa and that living in an environment of

continuous traumatic stress may well reduce the shock component of dealing with traumatic material in the debriefing context following a bank robbery. So, the nature of the debriefing task, in general, seems to place demands on debriefers that they perceive as being within their ability to deal with and can therefore be seen as structured, predictable and explicable as referred to in the Comprehensibility sub-component of Sense of Coherence.

The Sense of Coherence sub-components, Manageability and Meaningfulness, were found to have the greatest influence (34%) on debriefers' burnout scores, with the former, once again, exerting the greatest impact (30%). The variance in debriefers' scores on the silencing response scale was found to be more moderately influenced (14%) by the Sense of Coherence sub-components, Comprehensibility and Meaningfulness, with Comprehensibility having the relatively greater influence (11%). It is proposed that the previous interpretations of the relative influence of the Manageability and Comprehensibility would apply when considering the burnout and silencing response scores of the debriefers in this study. As conceptualised by Antonovsky (1979), the Meaningfulness sub-component of Sense of Coherence refers to the emotional and motivational elements within a person's coping tendencies and relates specifically to the extent to which a person views events as challenges rather than as burdens or events with no importance. The value that debriefers consistently placed on the role of debriefing in the workplace in the interviews certainly supports the finding of the relative influence of the Meaningfulness sub-component of Sense of Coherence. The results pertaining to compassion satisfaction would further endorse this finding.

Twenty-six percent of the variance in debriefers' compassion satisfaction scores was found to be attributable to the Meaningfulness and Comprehensibility components of Sense of Coherence, with Meaningfulness having the relatively greater (23%) impact Therefore, the extent to which debriefers view demands as challenging and worthy of investment and

engagement (Antonovsky, 1987) has a direct influence on their compassion satisfaction. This finding adds further support for Figley's (1995) trauma transmission model. In this model, Figley contends that a helper's empathic ability is linked to their empathic concern (the helper's motivation to act). Accordingly, helpers' motivation to help may be influenced by an anticipated sense of satisfaction in their helping efforts because they believe they may relieve another's suffering. Therefore, the meaning associated with the task of helping in this context can be seen to play a critical role in determining the helper's level of experience of compassion stress. Similarly, in the current study scores on the indicators of secondary traumatic stress and as well as the score on the indicator of compassion satisfaction, are clearly influenced by the relative meaning the debriefer attributes to his/her debriefing responsibilities.

The potential moderating role of Sense of Coherence and its sub-components in the relationship between the specific aspects of workplace trauma debriefers' experiences and the secondary traumatic stress indicators measured in this study was explored in the present study. Out of 112 moderated multiple regressions computed for the different scenarios, Sense of Coherence sub-components were found to be moderators in only 6 cases (5%). The majority of these findings (4) emerged when considering the silencing response indicator of secondary traumatic stress, with the relative influences of the moderator variable ranging between 14% and 16%. The relatively strong influence of the sub-component, Manageability, on the compassion fatigue scores of debriefers was reinforced in the moderated multiple regression analyses. Thirty-three percent of the variance in the compassion fatigue scores was found to be accounted for in the scenario with Manageability the moderating variable in the relationship between Stakeholder Commitment (Factor 3) of the WTDS(R) and this indicator of secondary traumatic stress.

The relationship between Stakeholder Commitment (Factor 3) and the silencing

response was found to be moderated by the Manageability and Meaningfulness sub-components of the Sense of Coherence construct as well as the total Sense of Coherence score. Therefore, the extent to which debriefers felt that (a) they have the resources available to meet the demands posed by stimuli and that (b) these demands are challenges worthy of engagement, exerted a moderating influence on the relationship between debriefers' silencing response outcome and the perceived commitment to the trauma programme of key organisational stakeholders. Furthermore, the relationship between debriefers' silencing response scores and their total scores on the WTDS(R) was found to be moderated by the Manageability component of the Sense of Coherence construct. This shows that the extent to which debriefers perceived themselves as having the resources available to meet demands, moderated the relationship between their Silencing Response scores and their overall experiences as trauma debriefers in the workplace.

However, while the relatively few moderating scenarios can be conceptually supported, the fact remains that Sense of Coherence and its sub-components were definitely not found to be consistent moderators of the relationship between the experiences of workplace trauma debriefers and indicators of secondary traumatic stress The present study's inconsistent findings regarding the moderating role of of Coherence and its components, are in line with those of Fritz (1989). Fritz found only partial support for the role of Sense of Coherence as a moderator, in that only 12 out of a possible 54 job related stressor- health related outcome relationships were found to be moderated by Sense of Coherence.

Focussing on the results related to the work attitudes within this context, Sense of Coherence and its sub-components very clearly did not emerge as consistent moderators of the relationship between workplace trauma debriefers ex- riences and their reported job satisfaction and organisational commitment. Only 2 out of a possible 56 (4%) moderating

scenarios were found to be statistically significant.

From the results in this study, it is clear that Sense of Coherence and its component parts exert strong main effects on the variance of the indicators of secondary traumatic stress scores. Similarly, Sense of Coherence did not emerge as a consistent moderator of the relationship between debriefers' experiences and significant work attitudes such as job satisfaction and organisational commitment. This conclusion is in accordance with that of Flannery and Flannery (1990) who suggested that Sense of Coherence be considered as a global predisposition to responding to life stress rather than as a specific moderating variable. This conclusion should also be seen in the light of contentions made by Semmer (1996). Accordingly, main effects may more commonly emerge in empirical studies due to the impact of health proneness constructs, such as Sense of Coherence, at an early point in the appraisal process. This would then support Antonovsky's contention that Sense of Coherence addresses the overall quality of an individual's behaviour rather than the individual's specific response to specific events. This finding is of significance to the conceptual understanding of the dynamic nature of secondary traumatic stress and supports theories in which the role of personality disposition, as it influences a person's cognitive appraisal, is given key prominence. Moreover, these findings, in conjunction with others discussed in this section, have significant practical implications regarding debriefer selection strategies. These implications will be fully discussed in the chapter to follow.

Antonovsky proposed a strong link between the Sense of Coherence construct and other coping resources. More specifically, he postulated that a strong Sense of Coherence enables a person to mobilise generalised resistance resources to combat stressors which in turn strengthens a person's Sense of Coherence via a feedback loop. The findings related to social support in this study will now be investigated and the link with Sense of Coherence explored.

Informal Organisational Arrangements

This component of the transformation process deals with the implicit organisational arrangements that emerge over time and which may either aid or hinder organisational performance. As such, findings relating to the exploration of the relative impact of aspects such as the social support and recognition received from key parties, are discussed in this section.

Social Support.

Social support is consistently identified as a key variable in determining a person's response to exposure to traumatic material (Beaton & Murphy, 1995; Dutton & Rubinstein, 1995; Green, 1993; Kleber & Brom, 1992; Murphy, 1988; Stamm & Pearce, 1995). However, as indicated in the literature review, much debate still continues around issues to do with the precise nature and role of social support in the response to traumatic incidents. In Phase 2 of the present study, social support was measured by using the Crisis Support Questionnaire developed by Joseph et al., (1992). As such, debriefers' perceptions of the availability of emotional and instrumental support following involvement in the debriefing process were assessed. The majority of debriefers were found to be satisfied with the support they received following their involvement in a debriefing exercise. Debriefers reported receiving support from a number of sources in both their home and work domains

An area of ongoing debate in the literature regarding the role of social support is whether social support should be considered as a moderator or an independent variable in its own right which exerts main effects on the dependent variable under investigation. Statistical analyses were therefore undertaken to determine whether social support had a buffering (moderating) or main effect in the context of the current study

The findings in Phase 2 of this study, indicate that social support did not emerge as a

consistent moderator of the relationship between trauma debriefers' experiences and the indicators of secondary traumatic stress as moderating effects were only found in 3 of the possible 28 scenarios (11 %). More specifically, social support was found to moderate the relationship between burnout and (a) length of time as a debriefer and (b) Self-efficacy (Factor 2) of the WTDS(R). The only other statistically significant moderating scenario found was in the case of compassion satisfaction, whereby social support emerged as a moderator of the relationship between compassion satisfaction and the time since the debriefer was last involved in a debriefing call-out (Last Debriefing).

When considering the total sample of debriefers, significant inverse relationships were found between social support and the indicators of secondary traumatic stress. As such, social support was found to have a direct but moderate influence on the variance in the scores of the secondary traumatic stress indicators with the range of influence being between 10% and 15%. Relatively stronger influences (ranging from 10% to 28%) on the secondary traumatic stress indicators emerged when considering the direct relationship of social support with the secondary traumatic stress indicators across the three organisational sub-samples. This trend was consistent except for two cases, namely, when considering the silencing response for Organisation 1, and compassion fatigue for Organisation 2. Statistically significant relationships emerged between social support and compassion satisfaction across all sub-samples. A particularly strong relationship(r = .70) between social support and compassion satisfaction was found for Organisation 3 (n=27).

These findings from Phase 2 of the present study show that within this context, social support generally emerged as a variable exerting main effects on the indicators of secondary traumatic stress. Accordingly, social support in this study was found to act as an antecedent to the consequences associated with exposure to traumatic material in the debriefing context, and

in line with the arguments of Murphy (1988), should therefore be viewed as a means of protecting debriefers from negative health outcomes such as secondary traumatic stress. However, given the emergence of some moderating scenarios in this study, these findings support the conclusions of Cohen and Wills (1985) and Sarason et al., (1990) wherein they state that social support may affect health in both direct and indirect ways and that the buffering and main effects hypotheses are therefore not mutually exclusive.

The link between the findings related to social support and Sense of Coherence in this study warrants discussion. The Sense of Coherence sub-component, Manageability, emerged as a consistent predictor of the variance in the secondary traumatic stress indicators in the present study. The construct of Manageability, includes the individual's perception of having adequate access to social resources and support systems. It can thus be argued that the low incidence of secondary traumatic stress reported by debriefers in the present study may have been contributed to by the interaction between the Manageability construct and perceived social support following involvement in the debriefing process. This would support the contentions made by writers in the field (Cohen & Wills, 1985; Antonovsky, 1987; Strümpfer, 1995) who argue that improved coping may result in the situation where a person is facing a stressful or traumatic incident and is able to maintain a strong sense of manageability, which may include a perception of adequate social support. The extent of congruence between perceived social support and personality disposition as operationalised by Sense of Coherence in the present study, can therefore have an impact on the nature of the outcomes of debriefers' experiences.

Issues related to perceived social support were further explored in the interviews conducted in Phase 3 of the present study. The perceived availability of social support was consistently alluded to in the interviews. The majority of the debriefers reported that their

managers were supportive of their debriefing responsibilities. In addition, when asked an open ended question regarding the influence on their debriefing effectiveness of facilitating and hindering factors, support from key parties such as the trauma programme co-ordinator, fellow debriefers, managers, colleagues, and friends and family, was consistently identified as a facilitating factor. Similarly, lack of support from managers was mentioned as a hindering factor. In the interviews, support from significant others was, therefore, found to have a potentially positive impact on a debriefer's perceived ability to perform effectively in the debriefing context.

Formalised support in the form of debriefing the debriefers following their involvement in a debriefing incident was evaluated positively by 9 out of the 10 respondents interviewed from Organisation 1 (routine debriefing of debriefers was not done in the other two organisations). These debriefers reported benefits from this debriefing such as reassurance that what they had done was correct, acknowledgment of their contributions, comfort in knowing others care and that they have the opportunity to share the debriefing experience with someone. Debriefers also reported finding it helpful to share their debriefing experiences with their partners at home and some also found support in discussing the debriefing experience with their managers and colleagues. These results clearly complement the findings which emerged from the quantitative phase of the present study and indicate that social support from significant others plays a key role in the prevention of negative consequences from the exposure to traumatic material in the debriefing context. This is in line with the contentions made by authors in this field such as Stamm and Pearce (1995).

When focussing on the work attitudes measured in the present study a different pattern of results emerged in contradiction to the findings regarding the relationship between the indicators of secondary traumatic stress and social support. Social support was found to be a

consistent moderator of the relationship between the differing components of workplace debriefer experiences and job satisfaction and organisational commitment. Indeed, social support was found to be a statistically significant moderator in 6 out of a possible 14 (43%) scenarios. Clearly, then, a buffering model rather than a main effects one is appropriate when considering the relationship between these significant work attitudes and debriefers' workplace experiences.

Stakeholder Commitment.

Recognition from, and commitment displayed to the trauma debriefing process by key stakeholders, were two other informal organisational factors which were hypothesised to have a potential impact on the consequences of being involved in trauma debriefing in the workplace. Stakeholder Commitment (Factor 3) of the WTDS(R), which is a combination of items to do with recognition and commitment issues, was found to correlate significantly with compassion fatigue when considering the whole sample and Organisation 3 separately. However, the relatively weak relationships between these variables was confirmed in the results of the stepwise regressions as this variable did not emerge as making a significant contribution to the variance in compassion fatigue scores of debriefers. Similar trends emerged when considering the relationship between these variables and the other indicators of secondary traumatic stress thereby leading the present researcher to conclude that factors such as key stakeholders' recognition and commitment to the debriefing programme do not exert a significant influence on the potentially destructive consequences of exposure to traumatic material in the debriefing context.

However, a different scenario arises when one considers the impact of these informal organisational factors on the compassion satisfaction scores of debriefers in the present study. Moderate to strong statistically significant correlations were found between the compassion

satisfaction scores and the WTDS(R) sub-component, Stakeholder Commitment (Factor 3), when considering the total sample of debriefers as well as those in Organisations 1 and 3. While recognition and commitment from key parties is clearly an important factor in the experience of compassion satisfaction, the relative influence of these informal organisational variables was not confirmed in the stepwise regressions, as other variables were found to have a relatively significantly greater influence on debriefers' compassion satisfaction scores.

Phase 3 of the present study elicited debriefers' responses to questions concerning significant stakeholders' relative commitment to the trauma debriefing programme and recognition given to debriefers. When focussing on the branch employees who had experienced a bank robbery, the majority of debriefers reported receiving a positive response towards the debriefers on arrival at the branch. This response, in turn, reinforced the relevant debriefers' commitment to the debriefing role. Three debriefers specifically mentioned that a facilitating factor in assisting them to perform their debriefing responsibilities effectively, was feeling that their assistance was being appreciated. In some situations, debriefers reported negative responses from branch employees especially in situations where these employees had been involved in other bank robberies. Debriefers in this context reported feelings of role confusion.

In the interviews, the reactions of other key parties were also considered, namely, those of the debriefers' managers, senior management and the trauma programme co-ordinator. As discussed earlier, the majority of debriefers reported that their managers were supportive of their debriefing involvement so long as debriefers were able to also deal effectively with their full-time work responsibilities. Clear differences, however, emerged between the organisations when eliciting responses regarding the perceived recognition received from, and commitment shown to, the debriefing process, by senior management and

the trauma programme co-ordinators. In general, the response received from debriefers in Organisation 1 in this regard were positive. In Organisation 3, half the respondents specifically mentioned senior management's perceived lack of commitment to the trauma debriefing programme as having a negative impact on their experience of being a debriefer in that organisation. A number of other problems associated with the programme co-ordination strategy in Organisation 3 were also mentioned by debriefers and can be seen to reflect a lack of commitment to the process by that organisation's trauma programme co-ordinator. These factors will be discussed in detail under the following section that specifically deals with formal organisational arrangements.

A similar trend emerged when focussing on the relationship between these workplace aspects of the trauma debriefers' experiences and significant work attitudes such as job satisfaction and organisational commitment A statistically significant relationship was found between job satisfaction and the Stakeholder Commitment (Factor 3) sub-component of the WTDS(R), across all the sub-samples of debriefers barring those in Organisation 1. Moreover, Stakeholder Commitment (Factor 3) emerged as one of two variables to exert a statistically significant influence on the job satisfaction scores of debriefers in Organisation 2, as well as when considering the total sample of debriefers.

The Stakeholder Commitment component of the WTDS(R) was also found to have a statistically moderate to strong relationship with organisational commitment across all sub-samples of debriefers with the exception of those in Organisation 1. Furthermore, Stakeholder Commitment (Factor 3) emerged as the sole statistically significant contributor to the variance in the organisational commitment scores of debriefers in Organisations 2 and 3.

From the findings in both Phase 2 and 3 of the current research, it would seem accurate to conclude that recognition from key stakeholders and the commitment that they show to the

debriefing process are important factors to consider in the overall experience of being a debriefer in the workplace. However, while important, these factors do not seem to exert as strong an influence on debriefers' outcomes on the secondary traumatic stress indicators, as compared to that of other factors such as personality disposition, social support, self-efficacy and the inherent nature of trauma debriefing task they do, however, seem to exert a relatively stronger influence on the work attitudes measured in this study when considering debriefers from the various sub-samples with the exception of those in Organisation 1.

Formal Organisational Arrangements

This component focusses on the structures, processes, methods and procedures that are explicitly and formally developed to facilitate the congruence between the organisation's strategy and the individual's perfor ance of tasks, such as trauma debriefing. Specific findings related to the trauma programme co-ordination strategies including debriefer selection and training, are discussed here

Debriefer selection strategies.

In Phase 3 of the present study, some debriefers interviewed made specific reference to issues related to the selection of debriefers. In their responses to various questions asked in the interviews, debriefers from Organisations 2 and 3 often made reference to the lack of commitment of other debriefers thereby questioning why those debriefers had been selected to participate in the trauma programme. More specifically, when asked about their view of the way in which the trauma programme was being

co-ordinated in their organisation, almost half the debriefers interviewed from Organisation 3 explicitly identified the need to screen debriefers more carefully to ensure their suitability, availability and commitment.

The perceived effectiveness of debriefer selection processes and procedures would

seem to have some influence on the general experiences and resulting consequences of debriefers in the workplace. However, it would seem that the relative importance of this aspect of trauma programme co-ordination really only emerges in the situation where the overall impression of the functioning of the programme's co-ordination is less than satisfactory.

Debriefer training.

Self-efficacy (Factor 2) of the WTDS(R) comprises all the items related to the Training sub-scale of the original WTDS, together with other items relating to self-efficacy. The relatively important influence of issues to do with the perceived effectiveness of the trauma training course can therefore be inferred in the results which emerged when considering the relationship between Self-efficacy (Factor 2) and the indicators of secondary traumatic stress measured in this study. Accordingly, Self-efficacy (Factor 2) was found to have a statistically significant moderate inverse relationship with burnout. Importantly, this component of the WTDS(R), with its numerous items regarding the perceived effectiveness of the trauma training course, emerged as the sole variable of statistical significance to influence the variance in the burnout scores of debriefers in the total sample as well as the three organisational sub-samples. The perceived effectiveness of the trauma training course is therefore of critical importance in the potential experience, or lack thereof, of burnout.

When considering the results pertaining to the relationship between the Self-efficacy sub-component of the WTDS(R) and debriefers' silencing response scores, a similar pattern is evident. Self-efficacy (Factor 2) was found to be a consistent contributor to the variance in debriefers' silencing response scores across debriefers in the total sample as well as those in Organisations 1 and 3. Furthermore, Self-efficacy (Factor 2) emerged as accounting for 34% of the variance in the compassion fatigue scores of debriefers in Organisation 3 although this trend was not repeated in the other sub-samples considered.

Debriefers' perceived effectiveness of the trauma training course is clearly a significant factor to be considered when exploring the satisfaction debriefers receive from their debriefing responsibilities. This is a result of the finding that Self-efficacy (Factor 2) emerged as the sole statistically significant contributor to the variance in the compassion satisfaction scores of debriefers across al the organisational sub-samples and the total sample.

The findings from Phase 3 of the present study confirm and complement those outlined above. Most debriefers interviewed reported feeling that they were able to deal with the skill demands involved in the debriefing process. A number of debriefers specifically mentioned that they were effective in using the relevant skills required in the stages taught to them in the training course. Almost half of the debriefers interviewed explicitly mentioned the trauma debriefing training course as being a facilitating factor when asked about hindering and facilitating factors that influenced their debriefing performance.

When looking at the findings related to job satisfaction and organisational commitment, Self-efficacy (Factor 2) with its items pertaining to the perceived effectiveness of the debriefer training course, was found to have a relatively strong statistically significant positive relationship with job satisfaction across all organisational sub-samples, barring Organisation 1. This sub-component of the WTDS(R) emerged as the statistically significant contributor to the variance in the job satisfaction scores of debriefers in Organisations 2 and 3 and the total sample of debriefers. In addition, Self-efficacy (Factor 2) was found to have a statistically significant moderate relationship with the organisational commitment scores of debriefers across all sub-samples barring Organisation 1. However, the relative influence of this variable (Self-efficacy) was not confirmed in the stepwise regressions pertaining to organisational commitment.

Clearly, then, the perceived effectiveness of the training received by debriefers in this

study had a significant positive influence on the experiences of debriefers and played a major role in their feelings of self-efficacy and role satisfaction. This, in turn, seemed have an important role in the low levels of secondary traumatic stress generally reported by debriefers and was also found to have some impact on the work attitudes of debriefers in the various organisational settings.

Trauma Programme Co-ordination Strategies.

Over-and-above aspects related to the selection and training strategies adopted by trauma programme co-ordinators in the three organisations, debriefers were requested to respond to other co-ordination activities such as those of programme evaluation, communication, development of standardised policies and procedures and debriefer duty rosters. Perceptions regarding these factors were obtained from debriefers in both the quantitative and qualitative phases of the present research.

In Phase 2, aspects related to trauma programme co-ordination activities formed Factor 1 (Programme Co-ordination) of the WTDS(R). This was the only research variable on which the three organisations were found to differ significantly. Organisation 1 was found to differ from Organisations 2 and 3 in this regard with Organisation 1 emerging in a more positive light. As will be shown further on, the differences between these organisations in this regard becomes more evident when considering the data from the interviews.

When focussing on the relationships between compassion fatigue and the three factors of the WTDS(R), with the exception of the sub-sample of debriefers from Organisation 3, stronger statistically significant inverse relationships emerged between Programme Co-ordination (Factor) 1 and compassion fatigue than between the other sub-components of the WTDS(R) and this indicator of secondary traumatic stress. The relative importance of perceptions related to the trauma programme co-ordination strategies adopted in

organisations, was confirmed in the findings which emerged from the stepwise regressions. Accordingly, Programme Co-ordination (Factor 1) was found to be the sole statistically significant contributor to the variance in the compassion fatigue scores of debriefers in the total sample, as well as Organisations 1 and 2, accounting for between 11% and 20% of this variance.

Similarly, when considering the secondary traumatic stress indicators, burnout and the silencing response, statistically weak inverse relationships between these secondary traumatic stress indicators and Programme Co-ordination sub-component of the WTDS(R) emerged. However, when considering Organisation 3 separately, these relationships were relatively strong. The relatively low influence of trauma programme co-ordination strategies on these indicators of secondary traumatic stress was confirmed in the stepwise regressions.

On exploration of the relationship between compassion satisfaction and aspects related to trauma programme co-ordination activities as measured in the Programme Co-ordination (Factor 1) sub-component of the WTDS(R), Programme Co-ordination (Factor 1) was found to have a moderate positive relationship with the compassion satisfaction scores of debriefers across all the sub-samples with the exception of those from Organisation 2. This result shows that the more positive the perceptions are of the trauma programme co-ordinating activities, the more positively debriefers perceive their debriefing responsibilities. However, the relative importance of this factor to the experience of compassion fatigue was not confirmed in the stepwise regression results as Programme Co-ordination (Factor 1) was not found to have a statistically significant impact on the variance in debriefers' compassion satisfaction scores.

The results relating to the programme co-ordination activities in the quantitative phase of the present study seem in contradiction to those which emerged in the interviews. Issues regarding trauma programme activities were repeatedly mentioned by debriefers in the

interviews, even when open ended content non-specific questions were being asked. For instance, when asked what difficulties debriefers had experienced in their last debriefing incident a number of debriefers, mainly from Organisations 2 and 3, mentioned practical programme co-ordination problems such as being called out when not officially on duty, and insufficient call-out details being provided. Various responses to the question regarding facilitating and hindering factors of the debriefers' performance, related to programme co-ordination strategies especially as concerned with the ineffectual use of a debriefer duty roster system. Once again, these response were received mainly from debriefers in Organisations 2 and 3. In the interviews debriefers were also asked to specifically comment on their views regarding the trauma programme co-ordination in their organisations. The overwhelming response from debriefers in Organisation 1 was positive, although a number of suggestions for further improvement were identified. A different trend emerged when considering the response from debriefers in the other two organisations. As such, in the case of Organisations 2 and 3, debriefers identified more negative factors than positive aspects associated with the way in which the trauma programme was being managed in that organisation.

Other issues raised by debriefers in the interviews may also be seen to relate to trauma programme co-ordination activities. For instance, senior management's perceived lack of commitment to the debriefing process (once again, a factor mentioned by debriefers from Organisation 3) could indicate a lack of effective marketing of the programme to key stakeholders in the organisation. Similarly, the findings regarding the debriefing of the debriefers following their involvement in a debriefing incident also reflect on the strategies adopted by the trauma programme co-ordinator. Support offered to debriefers in this way was a standard practice in Organisation 1 and was generally positively perceived. In Organisations 2 and 3, this did not occur as part of the formal debriefing process. Debriefers in these

organisations did not, however, generally perceive the need for this form of support.

The findings regarding the relationship between trauma programme co-ordination activities and the work attitudes - job satisfaction and organisational commitment - are also of interest here. Statistically significant positive and moderate relationships were found between Programme Co-ordination (Factor 1) and job satisfaction across the organisational sub-samples and the total sample, with the exception of Organisation 3. Indeed, Programme Co-ordination (Factor 1), was found to be the sole statistically significant contributor to the variance in the job satisfaction scores of debriefers in Organisation 1. This sub-component of the WTDS(R) emerged as being statistically significantly related to organisational commitment across all organisational sub-samples once again, in the stepwise regressions Programme Co-ordination (Factor 1) was found to be the sole statistically significant contributor to the variance in the organisational commitment scores of debriefers when considering the total sample of debriefers as well as those from Organisation 1.

From these findings it would seem accurate to conclude that trauma programme co-ordination activities do have an impact on the experience of being a debriefer in the workplace. Where these are positive, they would seem to enhance the general positive perceptions regarding debriefing responsibilities and specific work attitudes. The opposite would seem to hold true in the case where the trauma programme management strategies are viewed as less positive, yet it would seem that this would not detract from the inherent satisfaction debriefers obtain from their debriefing role and therefore their commitment to continue their involvement in the debriefing programme.

Summary

The results which have emerged from the quantitative and qualitative phases of the present study serve to emphasise the complex and dynamic nature of the outcomes resulting

from trauma debriefing in an organisational setting. In the literature review, the need to consider the context in which the trauma work occurs was identified by numerous authors (e.g., Beaton & Murphy, 1995; Peterson et al., 1991). The present study can be seen to have magnified this aspect of the experience of being involved in trauma counselling in the workplace context and has therefore shown how these factors complement the roles played by those more often considered in research into the nature and dynamics of secondary traumatic stress.

The adoption of Nadler and Tushman's (1981) model of organisational behaviour has been particularly useful in identifying the factors which may have a potential impact on the experiences of trauma debriefers in the workplace. Furthermore, this model has been of value in attempting to show how these various factors interrelate and influence the outcomes under investigation in this study. While a number of clear trends emerged throughout the findings, the use of Nadler and Tushman's framework for analysing organisational behaviour, facilitated the identification of unique trends in the interrelationship between factors within the three organisational settings.

The key findings in this study can be summarised as follows:

Outcomes

The sample of non-professional workplace trauma debriefers in the present study, in general, did not experience symptoms of secondary traumatic stress, in the long term. A number of common secondary traumatic stress symptoms were reported but these were experienced in the short term and seem to be more in line with the criteria associated with Acute Stress Disorder. However, changes to debriefers cognitive schemata regarding others, self, and the world in general, were still found to be present 6 weeks after their last debriefing incident. Debriefers in both the quantitative and qualitative phases of this study were found to

experience considerable role satisfaction reflecting the inherent rewards associated with the task of helping others in need.

Task

Contrary to the indications in the literature, the nature of the task of debriefing, in terms of whether it involved the debriefing of employees involved in robberies where there had or had not been serious injuries or deaths, was not found to impact on debriefers' scores on the secondary traumatic stress indicators. The experiences of the majority of debriefers indicated that verbal abuse and minor injuries were the more common characteristics of the debriefing incidents they were involved in and the results pertaining to the experience of secondary traumatic stress as influenced by the nature of the task, should be seen within this context. With reference to debriefers' combined debriefing and full-time employment roles it would seem that involvement in tasks other than that of trauma debriefing may well play a significant role in preventing the onset of secondary traumatic stress based on overexposure to traumatic material. Self-efficacy was found to be the most significant contributing variable to debriefers' role satisfaction as indicated by their compassion satisfaction scores. Furthermore, Self-efficacy, emerged as a strong and consistent contributor to debriefers' burnout and silencing response scores.

Individual

Demographic variables, such as age and gender were not found to have a statistically significant impact on the indicators of secondary traumatic stress and role satisfaction measured in this study. Previous exposure to work-related traumatic material did not have a statistically significant impact on the potential experience of secondary traumatic stress. Inconsistent findings emerged when focussing on the effects of prior exposure to non-work related trauma. In one instance, this exposure was found to be associated with higher

secondary traumatic stress as indicated by the burnout measure thereby emphasising the role of personal vulnerability in the potential experience of secondary traumatic stress; while in another, this previous exposure to non-work related trauma highlighted the role of resiliency which may result from this type of personal experience. Length of experience in the debriefing role was not found to be a consistent contributing variable to the experience, or lack thereof, of secondary traumatic stress. Personality disposition, as indicated by Antonovsky's Sense of Coherence construct, was found to have a significant direct effect (rather than a moderating effect) on the reaction of debriefers to their debriefing experiences.

Informal organisational arrangements

Social support was found to be an antecedent factor in the experience of secondary traumatic stress, exerting main effects rather than moderating effects in the relationship between workplace trauma debriefers' experiences and secondary traumatic stress indicators However, social support emerged as a consistent moderator of the relationship between the debriefers' experiences and their reported job satisfaction and organisational commitment. The importance of perceived support from management and the trauma programme co-ordinator was also highlighted in the findings in the present study. Recognition from, and commitment to the trauma programme by key stakeholders did not have a strong influence on debriefers' secondary traumatic stress indicators although they were found to have a stronger impact on their reports of role satisfaction. A strong link emerged between these stakeholders perceived commitment to the trauma programme and debriefers' job satisfaction and organisational commitment. Aspects pertaining to the recognition debriefers' receive were found not to exert a particularly strong influence on their experiences. This may once again, indicate to the rewarding nature inherent in the task of trauma debriefing.

Formal organisational arrangements

The perceived effectiveness of selection strategies adopted by trauma programme co-ordinators were not found to have a particularly meaningful impact on trauma debriefers' experiences. On the other hand, the training debriefers received emerged as being a strong contributing variable to the experiences and consequences of trauma debriefers in this study. More specifically, the perceived effectiveness of the training course was found to have a considerable influence on debriefers' burnout scores although this was not extended to their compassion fatigue results. Furthermore, the perceived effectiveness of the training received, played a major role in the debriefers' experiences of role satisfaction as indicated by their compassion satisfaction scores. The perceived effectiveness of the trauma programme co-ordinator's activities in general, was found to have a strong impact on debriefers' experience of compassion fatigue as well as their compassion satisfaction scores.

As a final comment in this summary, the WTDS(R) has been shown to be particularly useful in identifying and analysing the relationships between the various components of trauma debriefers' experiences in the workplace. The utilisation of this instrument combined with the interviews undertaken has allowed for an holistic and in-depth exploration of the experiences of trauma debriefers in the workplace context.

The results of this study have a number of practical and theoretical implications which are discussed in the following, final, chapter of this dissertation.

CHAPTER ELEVEN

Conclusion

Overview

In this, the final chapter of this dissertation, a critique of the present study is undertaken in the form of the identification of the limitations inherent in this study. In so doing, ways in which future research studies in this area can be improved will be identified. This is then followed by a discussion of both the practical and theoretical implications of the present study before ending with some concluding remarks.

Limitations

Considerable attention was paid to the conceptualisation and design of this study so as to anticipate and overcome potential problems. However, despite this, a number of limitations pertaining to the current study can be identified. These limitations are largely concerned with methodological issues. These limitations can be classified into the following broad categories: Research design; sample characteristics; measuring instruments; and data analysis.

Research design

The present study adopted a cross-sectional research design primarily to overcome issues of practicality related to sample size. The key limitation of this type of research design pertains to issues of causality. A number of significant findings emerged from the present study and it is the contention of the current researcher that these findings do make a contribution to the field. However, while statistically significant results from this study did emerge between the research variables in question, at no time can causality be inferred. The ideal approach would, therefore, have been a longitudinal study in which the experiences of trauma debriefers were regularly monitored from the onset of their involvement with the trauma programme throughout a specified time period. While this would certainly have been the preferred