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## Abstract

Psychological trauma results from exposure to an inescapable stressor that overwhelms a person's ability to cope. During the period of perceived threat a defensive process of denial and suppression frequently operates to control a person's emotional response to the situation. Emergency services personnel in particular, may actively employ a task-oriented approach to traumatic incidents: and suppress their anxiety and fear in order to maintain concentration and undertake their duties most effectively. In psychological terms, this behaviour may be seen as purposeful, adaptive dissociation. However, recent studies of emergency services personnel reveal that there are possible long-term risks associated with the experiencing dissociation during a traumatic situation. While the ability to control an emotional response may be viewed as an effective way of coping during an intense or traumatic situation, there is an inherent danger that this inhibition of emotions may become the source of long term psychological and physiological disturbance.

Psychological debriefing is a popular method of assistance for emergency services personnel following a traumatic incident. It is designed to promote the cognitive and emotional processing of a traumatic event. During a debrief, participants describe the traumatic experience (including their reactions and emotions) in order to begin to integrate and master key features of the experience.

While there is abundant anecdotal evidence suggesting that psychological debriefings can be beneficial, there have also been conflicting reports as to their actual effectiveness. Investigators have indicated that rigorous investigation of the effectiveness of psychological debriefing and its role in post-trauma recovery is urgently required. In particular, such investigations need to provide a clear answer to the question 'Is psychological debriefing related to the prevention of PTSD symptoms and associated psychological sequelae?'

In this study, an investigation was undertaken of 96 emergency services personnel involved in the response to the 'Port Arthur massacre', a critical incident in which a lone gunman randomly killed 32 visitors in a popular tourist venue in southern Tasmania. All participants were individually interviewed on two occasions: eight months after and twenty months after the incident. Two key findings from the research project are presented. Firstly, experiencing dissociative symptoms at the time of the incident was predictive of long-term psychological and physiological distress. Secondly, within the group of emergency services personnel who experienced dissociation at the event, those who disclosed their related thoughts and feelings at the subsequent group debriefings showed significantly less long-term psychological distress.

The results of this study offer insight into how the impact of biological changes caused by a traumatic event can be modified by the psychological processing of that event. The results support the suggestion that following a traumatic situation, a person needs to process and integrate the memory of that event if he or she is to 'recover' from his or her reaction to the situation. Psychological debriefing appears to provide an opportunity for the necessary psychological processing to commence and assist emergency services personnel in managing what might otherwise develop into PTSD.

**Acknowledgements**

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# Introduction

## Introduction

We have within us a limiting switch for pain that may assist us to escape from life-threatening physical danger by numbing our experience of physical pain (Siegfried, Frischknecht & de Sousa, 1990). A similar biological mechanism also controls our experience of psychological pain by shutting us off from emotional overload during an intense or traumatic situation (Young, 1995; Litz, 1992). However, when a physical danger has passed, we need to allow the physical pain to be experienced to facilitate the process of healing our body. Similarly, following a traumatic situation, we may need to process and integrate the emotional memory (psychological pain) of the event so that we may escape long-term psychological distress (van der Kolk, 1994).

Post Traumatic Stress Disorder (PTSD) is the most common diagnostic classification used to describe symptoms arising from traumatic experiences. Researchers are still endeavouring to isolate the risk factors for developing psychological problems, including PTSD, following trauma. Consequently, effective techniques for reducing their impact and assisting recovery are yet to be fully realised. This thesis explores the determinants of the impact of psychological trauma on emergency services personnel and the effectiveness of subsequent recovery programs. In particular, the thesis focuses on the use of dissociation as an adaptive strategy for avoiding the immediate impact of a traumatic event, its impact on long-term psychological health, and implications for the process of psychological debriefing as a trauma recovery method.

Section 1 of this thesis explores the impact of psychological trauma. The discussion will explore recent theoretical perspectives of psychological trauma; in particular, the suggestion that PTSD may represent the overreaction of a life-preserving neural mechanism to normal social stimuli. Initially, The next chapter explores the diagnosis of PTSD, the symptomatology of psychological trauma and the longer-term biological and behavioural changes evident in PTSD sufferers.

Chapter 2 provides a description of the prominent theoretical models of trauma and traumatic stress. Diagnostic reports of PTSD reveal that there are distinct differences in individuals' capacity to cope with traumatic stress. It is suggested that a traumatic experience is filtered through cognitive and emotional processes before it can be assessed as a threat (van der Kolk, 1994). Recent brain research exploring the processing of traumatic memories has supported these findings (LeDoux & Romanski, 1989; LeDoux, Iwata, Cicchetti & Reis, 1988, LeDoux, Cicchetti, Xagorasis & Romanski, 1990: LeDoux 1995, 1998; Davis, 1984, 1986, 1992; Goleman, 1996; Metcalfe & Jacobs, 1996). Metcalfe and Jacobs (1996) have also furthered understanding of trauma by describing it within a framework that assumes the operation of two memory systems, a 'cool' cognitive system and a 'hot' emotional fear system. They suggest that the systems respond differently to increasing levels of stress.

Chapter 3 details the influence of biological factors on the processing of traumatic experiences and the implications of recent brain research findings (LeDoux, 1998) for our understanding of the anatomy of trauma. Biological investigations (Yehuda & McFarlane, 1995) have suggested that the substrates of PTSD may not in fact be similar to the 'normative stress response' described by Selye (1956). They may indeed be a progressive sensitisation of biological systems that render an individual hyper-responsive to a variety of stimuli.

When we are exposed to a traumatic experience, an increased level of stress may negatively affect performance of the hippocampus (and the hippocampal/cortical memory system). This offers us a hypothesis to explain why memory disturbance occurs during a traumatic situation (van der Kolk, 1987a, 1994; van der Kolk & van der Hart, 1991; Squire, 1992; van der Kolk, McFarlane & Weisaeth, 1996). It would appear that extremely high levels of stress debilitate conscious (cognitive) memory and strengthen unconscious (emotional and sensory) memory of an event. This in turn leads to the

possibility of unconscious sources of intense anxiety (Goleman, 1996). In recent years, research of traumatised individuals has demonstrated that the high arousal and the resultant dissociative symptomatology that frequently occurs during a traumatic event may lead to the disorganisation and fragmentation of the memory of that experience and ultimately to the development of PTSD.

The finding that PTSD is not an inevitable consequence of trauma leads researchers to be increasingly precise in their codification of the impact of trauma and the vulnerability factors that give rise to and perpetuate the course of PTSD (Yehuda & McFarlane, 1995; van der Kolk, 1987a, 1997). Although there has been substantial research into the psychological processes that characterise those people who exhibit PTSD (see Raphael & Wilson, 1993), considerably less is known of the risk factors for developing psychological disorders following exposure to a traumatic stressor. Subsequently, effective techniques for reducing their impact and assisting recovery are also at an early stage of development.

One recognised PTSD risk factor is the experience of dissociative symptoms at the time of a traumatic event (Marmar, 1997). While experiencing dissociative symptoms during an event may temporarily serve a beneficial function (i.e. the ability to control an emotional response may be an effective way of coping and ensure 'efficiency' during an intense situation), in the long term, the resultant lack of integration of traumatic memories appears to be a critical element that may lead to the development of PTSD (van der Kolk & Fisler, 1995). Chapter 4 of this thesis explores the role of dissociation as an adaptive coping strategy. The chapter then focuses on the numerous studies that have demonstrated a strong relationship between dissociative symptoms and psychological trauma (Bremner, Southwick, Johnson, Yehuda & Charney, 1993; Marmar, Weiss & Schlenger, 1994; Weiss, Marmar, Metzler & Ronfeldt, 1995; Bremner & Marmar, 1998). Recent studies have further suggested that experiencing dissociative symptoms at the moment of a traumatic event is the single most significant predictor of the ultimate

development of PTSD (Marmar, Weiss & Schlenger, 1994; Spiegel, 1991, 1994; Cardena & Spiegel, 1989; Spiegel & Cardena, 1991; Bremner & Marmar, 1998; Koopman, Classen & Spiegel, 1994; Holen, 1991). Other important factors that may be implicated in the development of post-traumatic stress are further explored in Chapter 5.

Section 2 of the thesis investigates the process of recovery from psychological trauma. Chapter 6 begins with an exploration of current thinking and practice on the management and treatment of trauma. Therapists working with patients who have survived a variety of traumatic events generally work through several phases of treatment in a specific order. The approaches of two international experts on the treatment of psychological trauma (Bessel van der Kolk and Judith Herman) are then explored.

Emergency services (EMS) personnel are one group who are at risk of developing psychological disturbance from exposure to traumatic stressors (Westerink, 1995). It is likely that workers' methods of coping with their stress responses will be associated with the success or otherwise of 'integrating' a traumatic incident and adaptively learning from the experience (Lazarus & Folkman, 1984; Yehuda, Keefer & Harvey, 1990). During a traumatic situation, a process of denial and suppression of emotional reactions may assist an emergency services worker in optimising their work performance (van der Kolk & Fisler, 1995). Such practices, as they occur within the emergency services, may be labeled 'adaptive dissociation'. However, it is important to remember that many studies of people who develop PTSD have found significant prior and/or current evidence of dissociation (see Bremner & Marmar, 1998).

The prevention of severe post-traumatic reactions in the emergency services personnel has become a major focus in the last decade (Dyregrov, 1997). Chapter 7 explores the popular process of psychological debriefing, its historical development and our current understanding of its operation. Critical Incident Stress Debriefing (CISD) has been widely proposed as a major vehicle for modifying the stress reactions of emergency

services personnel (Mitchell, 1983; Mitchell & Bray, 1990; Mitchell & Everly, 1993, 1996, 1997; Robinson, 1994; Robinson & Mitchell, 1993, 1995). Despite the general support for psychological debriefing, the question of whether or not CISD is an effective or necessary intervention following a traumatic event has been a point of debate for some years (Bisson & Deahl, 1994; Ostrow, 1996; Raphael, Meldrum, & McFarlane, 1995; Robinson & Mitchell, 1995). Several studies have failed to reveal any effect resulting from this intervention, while other studies have shown either a strong positive or negative affect. Furthermore, it has been suggested that most studies, be they in favour of debriefing or not, have serious methodological flaws (Dyregrov, 1997). Psychological debriefing and in particular the process of CISD is explored in Chapter 8.

It has been suggested that there are important variables in the development of traumatic stress that need to be considered, in order to evaluate the effectiveness of psychological debriefing (Westerink, 1995). Exploring these variables may assist researchers understand the therapeutic agency in debriefing and help to anchor psychological debriefing within a stronger theoretical context. Chapter 9 explores this theme using an assessment of previous psychological debriefing and CISD research. Chapter 10 summarises the methodological issues that need to be addressed in future debriefing studies.

Section 3 of this thesis presents the Port Arthur Research Project. The study method is outlined in Chapter 11, including an overview of the incident and recovery operations. A description of the results in Chapter 12 is summarised within four key areas: pre-incident factors, incident factors, the critical incident stress management program, and post-incident factors. The chapter further explores the interrelationship of two significant variables in this study, dissociative experiences at the event and self-disclosure at the subsequent group debriefs. Finally, Chapter 13 summarises the implications of these and other recent findings for our understanding of the process of dissociation in the

development of post-traumatic stress and the pivotal role of psychological debriefing in the recovery process.

## *SECTION 1*

## *TRAUMA: BIOLOGICAL RESPONSES*

*'An experience may be so exciting emotionally as almost to leave a scar on the cerebral tissue' (William James, 1890)*

# Chapter 1

# Defining Trauma

# Chapter 1

# Defining Trauma

## Introduction

Trauma in the form of response to both natural and man-made disasters can cause disruption to cognitive and emotional processes (Ursano, McCaughey & Fullerton, 1994). When people are exposed to a traumatic situation, they often display a range of psychological and physiological responses that include hyperarousal, avoidance, aggression and depression (Kaplan, Sadock, & Grebb, 1994). Since all of these symptoms can occur in response to trauma, all will be considered in an assessment of post-traumatic stress symptoms. Once an individual becomes dominated by intrusions of a trauma, they may begin to reorganise their lives in order to avoid them (van der Kolk et al., 1996a). Avoidance may take many different forms including avoiding any reminders; taking alcohol or drugs to numb awareness of distressing emotional states; and utilising dissociative techniques to suppress unpleasant experiences from reaching consciousness. The sense of helplessness, conditioned hyperarousal, and other trauma-related changes may permanently change how an individual deals with stress, alter his/her self-concept and indeed, interfere with his/her view of the world as safe and predictable.

## PTSD: Diagnosis and Clinical Features

Post Traumatic Stress Disorder (PTSD) is the most common diagnostic classification used to describe abnormal and persistent symptoms arising from traumatic experiences. Diagnosis of this disorder indicates that a person has experienced a traumatic event involving actual or threatened death or injury to themselves or others (American Psychiatric Association, 1994; March, 1993). It also denotes that the person react to the event with fear, helplessness and/or horror. Three additional symptom clusters, if they persist for more than a month after the traumatic event and cause clinically significant distress or impairment, complete the diagnostic criteria. These are:

(i) *intrusions*, such as flashbacks or nightmares where the traumatic event is re-experienced,

(ii) *avoidance*, where the individual attempts to reduce exposure to people or things that might bring on their intrusive symptoms, and

(iii) *hyperarousal*, physiological signs of increased arousal, such as hyper-vigilance or increased startle response.

While PTSD may be considered a characteristic disorder arising from traumatic experiences, individual variations frequently occur (van der Kolk, Pelcovitz, Roth, Mandel, McFarlane & Herman, 1996). Depression, anxiety, and dissociative disorders are three other psychiatric disorders that may develop following traumatic experiences. Somatoform disorders have also been identified in some populations. Variations may result from differences in personal coping styles and subjective interpretation of the stressor, and undoubtedly affect both the severity and the type of symptoms experienced (McFarlane, 1984, 1985, 1986; Halligan & Yehuda, 2000; Shalev, Peri, Canetti, & Schreiber, 1996).

The risk of exposure to trauma has always been a part of the human condition (Ursano et al., 1994). In 1980, the American Psychiatric Association added PTSD to the third edition of its Diagnostic and Statistical Manual of Mental Disorders (DSM-III) classification scheme (American Psychiatric Association, 1980). From an historical perspective, the significant change ushered in by the PTSD concept was the stipulation that the etiological agent was outside the individual (i.e. the traumatic event) rather than an inherent individual weakness (i.e. a traumatic neurosis). The key to understanding the scientific basis and clinical expression of PTSD is the concept of trauma. In its initial DSM-III formulation, a traumatic event was conceptualised as a catastrophic stressor that was outside the range of usual human experience. The framers of the original PTSD diagnosis had in mind events such as war, torture, rape, the Nazi Holocaust, the atomic bombings of Hiroshima and Nagasaki, natural disasters (such as earthquakes, hurricanes,

and volcano eruptions) and human-made disasters (such as factory explosions, airplane crashes, and automobile accidents). They considered traumatic events as clearly different from the very painful stressors that constitute the normal vicissitudes of life such as divorce, failure, rejection, serious illness, financial reverses and the like. This difference between traumatic stressors and other stressors was based on the assumption that although most individuals have the ability to cope with ordinary stress, their adaptive capacities are likely to be overwhelmed when confronted by a traumatic stressor (Ursano et al., 1994).

PTSD is unique among other psychiatric diagnoses because of the great importance placed upon the etiological agent, the traumatic stressor. In fact, one cannot make a PTSD diagnosis unless a person has actually met the 'stressor criterion' which means that he or she has been exposed to an historical event that is considered traumatic. Clinical experience with the PTSD diagnosis has shown, however, that there are individual differences regarding the capacity to cope with catastrophic stress so that while some people exposed to traumatic events do not develop PTSD, others go on to develop the full-blown syndrome (Ursano et al., 1994). Such observations have prompted recognition that trauma, like pain, is not an external phenomenon that can be completely objectified. Like pain, the traumatic experience is filtered through cognitive and emotional processes before it can be appraised as an extreme threat (van der Kolk, 1997). Because of individual differences in this appraisal process, different people appear to have different trauma thresholds. Some are more protected and some more vulnerable to developing clinical symptoms after exposure to extremely stressful situations.

**Symptomatology**

Kardiner (1941) originally introduced the notion that 'traumatic neuroses' are 'physioneuroses' and that people with PTSD remain on constant alert for environmental threat. They act as if the original traumatic situation was still in existence and engage in

protective behaviours that may have failed on the original occasion. This physiological state of constant over-arousal is accompanied by difficulties with attention and concentration, as well as distortions in the processing of information, including a narrowing of attention onto sources of potential threat (Herman, 1992).

During the last decade it has become evident that the intensity of the initial physiological response to a potentially traumatic experience is the most significant predictor of long term outcomes (McFarlane, 1990; Marmar, Weiss & Schlenger, 1994; Marmar, Weiss & Metzler, 1996a, 1996b; van der Kolk & van der Hart, 1991). If the stress is sufficiently overwhelming, the resulting trauma sets up a conditioned emotional response in which the body continues to go into a fight or flight, or freeze response at the least provocation. This 'fight or flight' reaction involves the physiological manifestations of alarm, arousal and the emotion of anxiety (e.g., profuse sweating, tachycardia, and rapid respiration). These physical symptoms are manifestations of activation of the autonomic nervous system and the hypothalamic-pituitary axis, which in extreme circumstances are an adaptive response to an impending threat (Perry, 1999). Traumatised individuals appear to repeatedly experience life as a continuation of the trauma, and remain in a state of constant alert for its return. Many traumatised people who have made a conscious effort to put the trauma behind them, continue to experience anxiety and increased physical arousal when exposed to situations that remind them of the trauma. They will often experience reactions without necessarily being consciously aware of the origin of their extreme behaviours (Herman, 1992).

In 1991, van der Kolk and van der Hart provided a detailed description of key PTSD symptomatology. They included the following as common symptomatology:

(i) intrusive experiences,

(ii) hyperarousal,

(iii) numbing of response,

(iv) learning difficulties,

(v) affect dysregulation,

(vi) somatisation,

(vii) memory disturbances, and

(viii) dissociation.

*(i) Intrusion*

Remembrance and intrusion of a trauma may be expressed in many different forms, including flashbacks, strong emotional states, somatic sensations, nightmares, and interpersonal reenactments (van der Kolk, 1987a). Laub and Auerhahn (1993) organised the different forms of remembrance along a continuum, with each form progressively representing a deeper and more integrated 'level of knowing'. They included:

(i) not knowing,

(ii) fugue states (in which events are relived in an altered state of consciousness),

(iii) retention of the experience as compartmentalised, undigested fragments of perceptions that break into consciousness (with no conscious meaning or relation to oneself),

(iv) transference phenomena (where the traumatic legacy is lived out as one's inevitable fate),

(v) its partial, hesitant expression as an overpowering narrative,

(vi) the experience of compelling, identity-defining and pervasive life themes (both conscious and unconscious), and

(vii) its organisation as a witnessed narrative.

*(ii) Hyperarousal*

While people with PTSD tend to cope with their environment by emotional constriction, their bodies may continue to react to certain physical and emotional stimuli as if there were a continuing threat (van der Kolk, 1987a). Conditioned autonomic arousal to trauma-related stimuli has consistently been shown to occur in a variety of traumatised populations (van der Kolk et al., 1991). Autonomic arousal, which serves the essential

adaptive function of alerting the organism to potential danger, seems to lose this function in traumatised individuals. The easy triggering of somatic stress reactions causes people with PTSD to be unable to rely on bodily sensations to warn them against impending threat.

*(iii) Numbing of response*

Difficulty in controlling their emotions may lead traumatised individuals to invest most of their energies in avoiding distressing internal sensations, instead of attending to the demands of the external environment (Yehuda, Keefer & Harvey, 1995). These people also lose satisfaction with issues and events that had previously given them a sense of satisfaction or pleasure. This emotional numbing may be 'expressed' as depression, anhedonia, psychosomatic reactions, or as dissociative states. In contrast to the intrusive PTSD symptoms which occur in response to external stimuli, numbing is part of an individual's 'baseline functioning' (Nemiah, 1980; Glover 1992; van der Kolk, 1996). These individuals often become less involved in social interactions and can end up withdrawn and isolated.

*(iv) Learning difficulties*

Physiological hyperarousal interferes with the capacity to concentrate and to learn from experience (van der Kolk et al., 1996a, 1996b). Aside from experiencing amnesia for aspects of the trauma, traumatised people may find it difficult to remember ordinary events. Easily triggered into hyperarousal by trauma-related stimuli and troubled with difficulties paying attention, they may often display symptoms of Attention Deficit Disorder (ADD). Following a traumatic experience, people may fall short of some maturational achievements and regress to earlier modes of coping with stress. This may be expressed in excessive dependence and/or diminished capacity to make thoughtful, autonomous decisions.

*(v) Affect dysregulation*

People who suffer from PTSD are prone to suffer from problems with affect regulation (Herman, 1992). These include difficulty modulating anger, chronic self-destructive and suicidal behaviours, difficulty modulating sexual involvement, and impulsive and risk-taking behaviours. The combination of chronic dissociation, physical problems for which no medical cause can be found, and a lack of adequate self-regulatory processes is likely to have a profound impact on personality development. This may be reflected by disturbances such as a sense of separateness and disturbances of body image, a view of oneself as helpless, damaged and ineffective, and in difficulties with trust, intimacy, and self-assertion (Porges, 1994; Shore, 1997; Herman, 1992a, 1992b; Cole & Putnam, 1992; van der Kolk and van der Hart, 1991).

*(vi) Somatic reactions.*

Chronic anxiety and emotional numbing may hinder the ability to identify and articulate internal states (Pennebaker & Beall, 1986; Pennebaker & Susman, 1988; Pennebaker, 1985, 1990, 1993). Traumatised individuals may experience somatisation disorders, often relating to the world through their bodies. They have been reported to experience distress in terms of physical organs, rather than as psychological states (Saxe, Chinman, Berkowitz, Hall, Lieberg, Schwartz & van der Kolk, 1994). Somatisation is marked by an inability to identify the emotional valence of physiological states (Nemiah, 1977, 1985). Over the last 15 years, studies have repeatedly shown a close association between: somatisation and dissociation (e.g. Coons, Bowman & Milstein, 1988; Putnam, Loewenstein, Silberman & Post, 1984; Loewenstein, 1991), and between somatisation and PTSD, (e.g. Walker, Katon, Neraas, Jemelka, & Massoth, 1992; Saxe, et al., 1994; McFarlane, Atchison, Rafalowicz & Papay, 1994). It has been proposed that psychological trauma is the common etiological factor that links somatisation and dissociation (Kluft, 1991).

*(vii) Memory disturbance.*

Increased autonomic arousal interferes with psychological comfort. The resultant anxiety in turn may trigger memories of previous traumatic experiences. This is exemplified in research where Yohimbine injections (which stimulate norepinephrine release from the locus coeruleus) are able to induce flashbacks in Vietnam veterans with PTSD (Rainey, Aleem, Ortiz, Yeragani, Pohl & Berchou, 1987; Southwick, Krystal, Morgan, Johnson, Nagy, Nicolaou, Heninger & Charney, 1993). It has become clear that any arousing situation may trigger memories of historic traumatic experiences and precipitate reactions that are irrelevant to present demands (van der Kolk & Fisler, 1994).

*(vii) Dissociation*

Individuals who have learned to dissociate in response to trauma are likely to continue to utilise dissociative defenses when exposed to new stressors (Spiegel, 1991; Marmar, 1997; Weiss, Marmar, Metzler & Ronfeldt, 1995; van der Kolk et al., 1995a). There is further focus on this symptom in a subsequent chapter of this thesis.

## Epidemiology

Reported rates for people whose traumatic stress persists, vary greatly (Green, Lindy & Grace, 1985; Green, Grace, Lindy, Titchener & Lindy, 1983; McFarlane, 1988a, 1988b, 1989). For example, using the diagnostic criteria of PTSD, researchers have obtained figures as low as 4% in Puerto Rico two years after disastrous floods and mudslides (Green & Lindy, 1994). However, other disasters have consistently shown higher rates of reactions. Following the Mount St. Helens disaster, 11% of men and 21% of women developed depression, anxiety or PTSD in the first two years after the eruption (Shore, Tatum & Vollmer, 1986; Shore, Vollmer & Tatum, 1989). Research has shown that reported rates of PTSD following man-made disasters have been significantly more widespread than those following natural disasters. For example, in the United States, 19% PTSD rate was reported after a mass shooting at a school (Schwarz & Kowalski, 1991) and a PTSD rate of 20% for males and 36% for females two months following a

mass shooting in a cafeteria (North, Smith & Spitznagel, 1994). Figures from similar Australian studies also show high distress rates. Following the Newcastle earthquake, 22% of people in a 'high exposure' group were classified as 'PTSD likely' (Goenjian, Najarian, Pynoos, Steinberg, Manoukian, Tavosian & Fairbanks, 1994). Australian firefighters identified as being at risk of developing clinically significant symptoms were interviewed 42 months after the Ash Wednesday fires. Results showed a long term PTSD rate of 36%, with another 13% having "borderline PTSD" (McFarlane, 1992). In a summary paper, Green and Lindy (1994) suggest that PTSD disorder rates can vary greatly depending on exposure and the type of event.

In recent years, studies have shown that PTSD is one of the most common of psychiatric disorders (Davidson, Schwartz, Storck, Krishnan & Hammett, 1985; Davidson, Hughes, Blazer & George, 1991; Davidson & Fairbank, 1993; Davidson & Foa, 1993; Bisson, 1997). The National Vietnam Veterans Readjustment Study (Kulka, Schlenger, Fairbank, Hough, Jordan, Marmar & Weiss, 1990) found that approximately twenty years after the end of the Vietnam War, 15% of Vietnam veterans continued to suffer from PTSD. PTSD is also prevalent in the general population, particularly among psychiatric patients. Recent data from a U.S. national co-morbidity survey indicates PTSD prevalence rates are 5% and 10% respectively among American men and women (Kessler et al., 1996). Other studies have demonstrated a life time PTSD prevalence of between 1% (Helzer, Robins & McEvoy, 1987) and 9% (Breslau, Davis, Andreski & Peterson, 1991) of the general population and at least 15% in psychiatric in-patients (Saxe et al., 1994). Although PTSD is associated with high levels of chronicity, co-morbidity and functional impairment (McFarlane 1992a), general levels of functioning vary substantially between individuals (van der Kolk, 1994, 1997).

**Individual Response to Trauma**

It is widely accepted that we create meaning out of the context in which an event occurs (Reed, 1992). It would follow that there is a strong subjective component inherent in an

individual's response to traumatic events (van der Kolk et al., 1996). Individual differences in susceptibility to PTSD stem from a variety of sources. Individuals vary in their assessment of the threat of a traumatic event, even when the risk is dramatic and clearly evident (Ursano et al., 1994). Response to traumatic events may vary based upon the degree to which they are seen as preventable. Some aspects of traumatic events, such as exposure to death, contain no actual risk to life but clearly evoke high anxiety, thoughts of death and imagined risk. Identification and emotional involvement can play an important role in the impact of a traumatic incident.

Risk for PTSD increases with the level of exposure to trauma. Generally, events that endure the longest have the greatest psychological impact (Barlow, 1993). Chronic or multiple traumatic experiences are likely to be more difficult to overcome. There is also evidence that early traumatic experiences (e g. during childhood), especially if these are prolonged or repeated, may further increase the risk of developing PTSD after traumatic exposure as an adult (Perry, 1999).

### *Secondary Traumatisation*

An additional aspect of traumatic exposure affects primarily the workers who help trauma and disaster victims. Psychologists and other mental health professionals as well as emergency personnel (emergency medical workers, police officers, fire officers, ambulance officers and state emergency services personnel) may all be exposed to the intense pressure of victim suffering (Figley, 1986, 1989, 1995; van der Kolk et al., 1995, 1996; Yassen, 1995). These professions are at-risk for 'secondary traumatisation' (Figley, 1995). Known by various other names such as compassion fatigue, vicarious traumatisation, and burn-out, the related symptoms are generally less severe than the PTSD symptoms experienced by direct disaster victims (Figley, 1995). Nonetheless, these symptoms can affect the livelihoods and careers of those with considerable training and experience in working with disaster and trauma survivors (Herman, 1992b). Van der

Kolk and colleagues (van der Kolk et al., 1995) suggest that there are three general risk factors for secondary traumatisation:

(i) exposure to the stories or images of disaster victims,

(ii) empathic sensitivity to others suffering, and

(iii) unresolved emotional issues that relate to the observed suffering of others.

In addition, some personnel may develop greater distress, when their co-workers, managers or family members, who may not fully understand their situation, poorly manage or assist them (Mitchell, 1983). This in turn may exacerbate their PTSD symptoms.

### *Other Problems Resulting from Traumatic Incidents*

PTSD is not the only problem that may eventuate from a traumatic incident. Many other difficulties occur, leading to great personal and social cost. There is likely to be an increase in the incidence of acute stress symptoms, depression (Green & Lindy, 1994); dissociative symptoms (Koopman, Classen & Speigel, 1994); general health problems (Raphael, 1985); increased alcoholism, marital discord and intra-familial and interpersonal violence (Goenjian et al., 1994). Apart from personal and familial distress, there are economic outcomes that are problematical. Holen (1991) found increased accident-proneness in survivors of an oil-rig disaster and Goenjian and colleagues (1994) reported an increase in work related injuries among police in the 12 months following the Armenian earthquake. Leeman-Conley (1990) quoted the cost to the Commonwealth Bank for the year 1988, following hold-ups as almost 1000 staff working days lost and $18,488 paid in compensation for sickness and medical expenses.

## Trauma in the Emergency Services

Many professionals in the emergency field have expressed alarm over attrition from the field and the potential for burnout in those who remain (McCammon & Allison, 1995). Studies of occupational stress in emergency medical services workers have examined

factors contributing to burn-out, such as organisational variables, role perceptions and working conditions. Neale (1991) investigated work stress in emergency medical technicians (EMTs) and found higher levels of burn-out, stress and strain, and lower coping skills than in samples of other occupational groups.

Emergency services workers are at risk for behavioural and emotional re-adjustment problems as well as physical danger (The National Centre for PTSD (NC-PTSD), 1998). The psychological problems that may result from traumatic experiences include:

(i) Emotional reactions: temporary feelings of shock, fear, grief, anger, resentment, guilt, shame, helplessness, hopelessness, emotional numbness,

(ii) Cognitive reactions: confusion, disorientation, indecisiveness, worry, shortened attention span, difficulty concentrating, memory loss, unwanted memories, self-blame,

(iii) Physical reactions: tension, fatigue, edginess, difficulty sleeping, bodily aches or pain, being startled easily, racing heartbeat, nausea, change in appetite, change in sex drive, and

(iv) Interpersonal reactions in relationships at work, at home, or with friends, such as: distrust, irritability, conflict, withdrawal, isolation, feeling rejected or abandoned, being distant, judgmental, or over-controlling.

Most emergency services workers only experience mild to normal stress reactions, and traumatic experiences may even promote personal growth and strengthen relationships (The National Centre for PTSD (NC-PTSD), 1998). However, as many as one in three emergency services personnel experience some or all of the following severe stress symptoms, which may lead to lasting PTSD, anxiety disorders, or depression:

(i) dissociation (feeling completely unreal or outside yourself, like in a dream; having a blank; periods of time you cannot remember),

(ii) intrusive re-experiencing (terrifying memories, nightmares, or flashbacks),

(iii) extreme attempts to avoid disturbing memories (such as through substance use),

(iv) extreme emotional numbing (completely unable to feel emotion, as if utterly empty),

(v) hyperarousal (panic attacks; rage; extreme irritability; intense agitation),

(vi) severe anxiety (paralysing worry, extreme helplessness, compulsions or obsessions), and

(vii) severe depression (complete loss of hope, self-worth, motivation, or purpose in life).

Emergency services workers who directly experience or witness any of the following during or after a traumatic situation are at greatest risk for severe stress symptoms and lasting readjustment problems (The National Centre for PTSD (NC-PTSD), 1998):

(i) life threatening danger or physical harm (especially to children),

(ii) exposure to gruesome death, bodily injury, or bodies,

(iii) extreme environmental or human violence or destruction,

(iv) loss of home, valued possessions, neighborhood, or community,

(v) loss of communication with/support from close relationships,

(vi) intense emotional demands (such as searching for possibly dying survivors or interacting with bereaved family members),

(vii) extreme fatigue, weather exposure, hunger, or sleep deprivation,

(viii) extended exposure to danger, loss, emotional/physical strain, and

(ix) exposure to toxic contamination (such as gas or fumes, chemicals, radioactivity).

## Conclusion

What distinguishes people who develop PTSD from people who are merely temporarily overwhelmed is that the former become fixated on the trauma and continue to re-live it in their thoughts and feelings. McFarlane (1988a, 1988b) suggests that it is this intrusive

reliving, rather than the traumatic event itself, that is responsible for the complex biological and behavioural changes classified as PTSD. Once an individual becomes dominated by intrusions of the trauma, they begin to organise their lives around avoiding them. Avoidance may take many different forms including utilising dissociative techniques to suppress unpleasant experiences from reaching consciousness. The helplessness, conditioned hyperarousal, and other trauma-related changes may permanently change how an individual deals with stress, alter his/her self-concept, and indeed interfere with his/her view of the world as safe and predictable (van der Kolk et al., 1996a). The following chapter will explore these and other theoretical perspectives of trauma, including the role of fear conditioning in the development of post-traumatic reactions.

# Chapter 2

# Theoretical Models of PTSD

# Chapter 2

# Theoretical Models of PTSD

## Introduction

In the absence of empirical data about the effects of trauma, support for the original conceptualisations of PTSD was gathered largely from other areas of theory and research. A major intellectual cornerstone for early conceptions of PTSD was the field of biological studies of stress, which suggested a normal continuum of responses to adversity (Selye, 1956; Mason, 1975). During the formative years of empirical biological studies of PTSD, most researchers hypothesised that neurobiological alterations in this disorder would be similar to those observed in studies exploring the neurobiology of stress (see Krystal, Kosten, Perry, Southwick, Mason & Giller, 1989; van der Kolk, Greenberg, Boyd & Krystal, 1985; Kolb 1987). In particular, Selye's findings that any adversity could provoke a biological stress response (Selye, 1956) provided scientific validity to the conception of PTSD as being scientifically observable. Furthermore, the Selye formulation suited the political and social agenda that wanted to shift the emphasis away from the victim's vulnerability as the etiologic factor and focus on the responsibility of the perpetrator (Yehuda & McFarlane, 1995). The concept of an *a priori* biological response to stress was a counter-argument to critics who attacked the diagnosis of PTSD as having a political and philosophical origin. It also provided a scientific hypothesis that a biological response to trauma may reflect a natural physiologic process (Yehuda & McFarlane, 1995).

A second body of literature compatible with Selye's concepts related to the life-events literature (McFarlane 1985; Bidzinska, 1984). This literature provided indirect support for the notion of PTSD as the exaggeration of a normative stress response by demonstrating a temporal relationship between adverse life events and the development of psychiatric and physical symptoms. Similarly, the crisis intervention and bereavement fields have provided clinical support for the observation that transient traumatic events

can produce symptoms that are amenable to intervention (Raphael, 1983; Cranshaw, 1963; Kinston, 1974; Lifton, 1976). These fields have been important to the mental health conceptions of PTSD because they provided a therapeutic model of how to address the 'event' in treatment (Mitchell, 1983; Blaufarb & Levine, 1972; Raphael, 1977, 1986; Austin, 1992). The crisis intervention literature formed the conceptual basis for viewing chronic PTSD as a prolongation of the normal response to stress, as well as for the use of preventive debriefing treatments that are currently used following exposure to trauma (Yehuda & McFarlane, 1995).

Although these areas of psychological theory and research are likely to have influenced original conceptions of PTSD, the relevance of these notions to current knowledge of PTSD may require re-evaluation. For example, empirical data on the biology of PTSD suggests a formulation that differs from the one that might have been predicted by the Selye model (Yehuda, Resnick, Kahana & Giller, 1993). Furthermore, studies of the prevalence, course, and co-morbidity of PTSD have raised issues regarding the role of the stressor as the true etiologic factor in the development of this disorder. Findings from empirical studies of PTSD illustrate that contrary to what might have been predicted at the time of the diagnosis of PTSD, many recent findings are inconsistent with the notion that traumatic events are the primary cause of symptoms (McFarlane, 1986; Southwick, Morgan, Nagy, Bremner, Nicholau, Johnson, Rosenheck & Charney, 1993; Bremner, Southwick, Brett, Fontana, Rosenheck & Charney, 1992; Emery, Emery, Shama, Quiana & Jassani, 1991). They challenge the idea of PTSD as a typical stress response (Yehuda & McFarlane, 1995).

## Psychological Perspectives of Trauma

### *A Psychodynamic Model*

Prior to the recognition of PTSD as a psychiatric disorder, many theoretical ideas concerning stress reactions were psychodynamic in origin. The psychoanalytic model of PTSD hypothesised that the trauma reactivated a previous quiescent, yet unresolved

psychological conflict (Freud, 1964). The revival of the childhood trauma is said to result in regression and the use of defense mechanisms of repression, denial and undoing. The 'ego' relives and therefore tries to master and reduce anxiety. The person also receives secondary gains from the external world: the most common of which being monetary compensation, increased attention or sympathy, and the satisfaction of dependence needs. The gains are said to reinforce the disorder and its persistence.

### *A Cognitive Model*

A cognitive view is that the brain is trying to process the massive amount of information that the trauma has provoked by alternating periods of acknowledging (repetition/re-experiencing) and blocking (denial/avoiding) the event (Horowitz, 1976). A cognitive approach to PTSD posits that affected persons are unable to process or rationalise the trauma that precipitated the disorder. Each time they re-experience the stress rather than resolving it, they continually re-use avoidance techniques. Alternating periods of acknowledging the event and blocking it is consistent with their partial ability to cope cognitively. Horowitz (1986) continued the development of this model to include the potential strong social support to protect against the development of PTSD.

### *A Behavioural Model*

The behavioural model of PTSD proposes that any stimulus associated with the traumatic event can become capable of eliciting a conditioned response similar to that associated with the original trauma (Keane, Zimering & Caddel, 1985). The model indicates that the disorder has two phases in its development. First, the trauma (the unconditioned stimulus) is paired, through classical conditioning, with a conditioned stimulus (physical or mental reminders of the trauma). Second through instrumental learning, the person develops a pattern of avoidance of both the conditioned stimulus and the unconditioned stimulus. Keane and colleagues proposed a two-factor learning theory model of PTSD symptom development. Additional stimuli, associated indirectly with the trauma, create similar reactions through stimulus generalisation and higher-order conditioning.

Avoidance behaviours are learned in order to escape or prevent the conditioned response. Therefore, repeated negative reinforcement of avoidance makes it very resistant to extinction. This explains the persistence of anxiety symptoms long after other symptoms decrease significantly. The principles of higher-order conditioning on stimulus generalisation are used to explain why symptoms often worsen over time as more and more stimuli elicit traumatic memories and physiological arousal. Keane, Scott, Chavoya, Lamparski and Fairbank, (1985b) suggested that delayed onset of PTSD may actually result from symptoms gradually worsening over time until they reach a critical point. Behavioural models continue to evolve as they incorporate additional variables such as individual characteristics, including social support as well as cognitions. Foy, Osato, Houskamp and Neumann (1992) proposed a behavioural model in which the maintenance of PTSD symptoms is influenced substantially by buffering factors such as social support and vulnerability factors such as a family history of psychopathology.

### *An Information Processing Model*

Information processing models of PTSD generally stem from Lang's (1977, 1979, 1985) theory of emotion. Lang posited a semantic memory network of interconnected points of information including trauma-related stimuli, information about response events, and information about the meaning of both stimuli and responses. Foa, Steketee and Rothbaum (1989) suggested that traumatic events create very large and complex fear networks that are activated readily because of the large number of interconnections formed through conditioning and generalisation. Associations that were once considered neutral and safe may become connected with fear, leading to a sense of unpredictability and uncontrollability that is important in the development and maintenance of PTSD. However, this model appears to fit combat-related PTSD better than single-event traumas.

Theoretical models have become increasingly comprehensive as our knowledge concerning the effects of trauma increases. For example, Creamer, Burgess and Pattison

(1992) proposed a cognitive processing model for reactions to trauma that includes a feedback loop among intrusions, avoidance and symptom levels. Like other processing models, Creamer and colleagues' model views the successful processing or integrating of the trauma as central to recovery. Creamer and colleagues (1992) argue that intrusive activity is indicative of fear network activation and the process of network resolution. Thus, although intrusive memories are associated with psychological distress at the time of a traumatic event, they are conceptualised as a form of processing. They suggest that high levels of initial intrusion are predictive of successful recovery. Creamer and colleagues also argue that intrusion precedes avoidance, which is conceptualised as a coping strategy in response to the discomfort that arises from intrusive memories. Although avoidance may reduce immediate distress, they suggest that excessive reliance on this strategy may be maladaptive because it reduces fear network activation and thus network resolution processing.

In a test of the model with 158 office workers following the Queen Street shootings in Melbourne, Creamer and colleagues (1992) showed that intrusive activity at 4 months, as measured using the Impact of Events Scale, was predictive of lower distress scores at 8 months and intrusion at 8 months was predictive of lower distress at 14 months. Avoidance, however, was not found to predict stress. Other research data, has shown contradictory evidence, with high levels of intrusion predictive of poor outcomes. McFarlane (1992) examined data from 290 firefighters who had completed questionnaires at 4, 11 and 29 months after exposure to disaster. These results showed that intrusive thinking at 4 months, as assessed using the IES, was predictive of distress at 11 months and that intrusive thinking at 11 months was predictive of distress at 29 months. The question remains as to what is the relationship between intrusion, avoidance, and later distress.

## Biological Perspectives of Trauma

### *Animal Models*

Biological theories of PTSD have developed both from pre-clinical studies of animal models of stress and measures of biological variables of clinical populations with PTSD. The theories attempt to explain the development of PTSD on an entirely different level. Van der Kolk, Boyd, Krystal and Greenberg (1984) developed a biological model based on the observation that PTSD shares many similarities with the animal model of inescapable shock. Van der Kolk and colleagues (1984, 1995a) suggested that the crux of trauma is the prevention of an attempt to fight or flee. The event that will traumatise a person is one in which the urge to fight or flee is thwarted and the person freezes. The freeze state becomes an altered state of consciousness, a state of dissociation. They suggest that the freeze state of 'playing dead' when captured by a predator occurs to a greater or lesser extent in all animals. The captured organism freezes when unable to fight or take flight. In humans it is presumed by Bessel van der Kolk that this results in an altered, dissociated state of consciousness that disrupts verbal encoding and results in implicit memory storage of nonverbal memory fragments.

### *Neurological Changes*

Van der Kolk and colleagues (1984) postulated that PTSD symptoms result from changes in neurotransmitter activity. The hyperamnesia symptoms, exaggerated startle responses, and aggressive outbursts of PTSD sufferers are thought to be associated with noradrenergic over-reactivity to trauma-relevant stimuli followed by depletion of these brain chemicals. Decreases in central nervous system levels of noradrenalin are thought to account for symptoms such anhedonia, social withdrawal and emotional numbing. Endogenous opiates released during re-exposure result in stress-induced analgesia. Subsequent depeletion of the endogenous opiates is experienced as aversive, setting up a cycle of behaviour in which the victim may seek exposure to stress repeatedly in an attempt to regain the analgesic effects.

Several models describe the physiology of PTSD. Both Kolb (1987) and McGaugh (1990) emphasised the effects of exposure to stressors on the central nervous system. Excessive stimulation experienced in traumatic events may cause damage or alteration to neuronal pathways. Other research supports trauma induced change in brain neurochemical systems as contributing to PTSD. For example, Charney and colleagues (Charney, Woods, Krystal & Heninger, 1990; Charney, Delgado, Price and Heninger, 1991) found that changes in seratonin function may be associated with anhedonic symptoms. Although many biological models are intriguing, they appear preliminary in nature and leave many puzzles of PTSD unexplained. For example, the delayed onset of PTSD, the impact of mediating variables, and individual differences have not been addressed by most of these models (Calhoun & Resick, 1993).

### *Anatomical Changes*

In the last decade, researchers have explored the influence of the amygdala in the fear responses of trauma victims. The focus has been on the body's chronic physiological adaptation to traumatic states, which appears to affect the day-to-day functioning of trauma victims (van der Kolk, et al., 1995, 1996). Researchers have speculated that chronic physiological states alter the brain's chemistry, affecting the long term functioning of individuals and resulting in memory impairment and free floating anxiety of an unrecognisable source. Van der Kolk contends that traumatic memory, a result of psychobiological responses to extreme stress, is stored differently from normal memory. Individuals experiencing extreme stress are unable to effectively use declarative/semantic memory which is regulated by the thalamus, amygdala and hippocampus. Van der Kolk further suggests that semantic memory, an active process in which recall depends on existing schema, can be disorganised by trauma. However, trauma does not interfere with non-declarative memory systems. When stress causes over stimulation of the amygdala, memories are stored in sensorimotor modalities in the form of somatic sensations and visual images.

Concurrently, changes are said to occur in the pituitary gland which regulates the release of CRF, the main stress hormone the body secretes to mobilise the emergency fight-or-flight response (van der Kolk, 1997). These changes cause CRF to be over-secreted, particularly in the amygdala, hippocampus, and locus coeruleus, alerting the body for an emergency that, in reality, is not there. This scenario primes the PTSD sufferer to over-react. In individuals who hypersecrete CRF, the startle response is overactive. A further set of changes occurs in the brain's opioid system, which also becomes hyperactive, secreting endorphins to blunt the feeling of pain. This allows individuals to develop a heightened tolerance for pain. In PTSD, endorphin changes lead to a numbing of certain feelings. This change appears to explain the set of 'negative' psychological symptoms in PTSD: anhedonia and a general emotional numbness, a sense of being cut off from life or from concern about others feelings.

These neural changes also appear to make an individual more susceptible to further traumatisation. Goleman (1996) in his popular text 'Emotional Intelligence', synthesises a range of psychological research studies into a treatise for the general public exploring the implications of these findings for our understanding of the role of emotions. He reviews a number of animal studies that suggest that when young animals are exposed even to mild stress, they are far more vulnerable than unstressed animals to trauma-induced brain changes later in life. These neural changes appear to offer short-term advantages for dealing with the emergencies that prompt them. Under extreme stress, it is adaptive to be highly vigilant, aroused, ready for any contingency, and impervious to pain. The body is primed for sustained physical demands, and for the moment, indifferent to what might otherwise be intensely disturbing events. These short-term advantages, Goleman suggests, become lasting problems when these brain changes become habitual.

## Conclusion

A large number of theoretical models have been proposed in attempts to organise the observed patterns of reactions in PTSD and to explain the development of these patterns. These models vary considerably in their level of comprehensiveness and they tend to overlap a great deal. The major trends have been in the development of psychological and biological models of psychological trauma.

The next chapter will further explore theoretical perspectives of PTSD by reviewing recent brain research that has assisted in understanding the impact of trauma on memory processing, the pivotal role of fear-conditioning in this process and its influence on post-traumatic reactions.

# Chapter 3

# The Anatomy of Trauma

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# The Anatomy of Trauma

## Introduction

Studies exploring fear conditioning in animals have provided researchers with insight into the underlying psychological mechanisms that operate during a person's reaction to and recovery from a traumatic experience (LeDoux, 1998; Davis, 1992). These researchers have suggested that the brain has two memory systems: one for ordinary facts and one for emotionally charged ones. Goleman (1996) has suggested that a unique system for emotional memories would make evolutionary sense, ensuring that animals would have particularly vivid memories of what threatens them (see also Nadel, 1992, 1994). Goleman in his 1996 publication *Emotional Intelligence* explored the role of emotions and emotional memory. In reference to PTSD, he suggested that trauma represented a significant lowering of a person's neural threshold for alarm, leaving them primed to react to life's ordinary moments as though they were emergencies.

## An Anatomical Perspective

Researchers in the field of cognitive neuroscience have been recasting psychoanalytic ideas in anatomical terms, changing the way we understand emotions. Joseph LeDoux, a professor of neural science at New York University, has been especially interested in one particular brain structure, the amygdala. His pioneering work in this field was described in his 1997 book *The Emotional Brain*.

The emotion that particularly interested LeDoux was fear. He defined fear as our most primitive emotion and the one most closely identified with the amygdala, one of the least evolved structures in our brain (LeDoux, 1997). LeDoux suggests that this has made it easy to reproduce and study in animals through the technique of fear-conditioning. He has explained that when we encounter something dangerous, the danger-stimulus is conveyed first to our amygdala, which initiates the 'proper' sequence of responses:

sweaty palms, adrenalin, pounding heart, flight. These are all automatic responses: we don't need to be conscious of them. If we were, our brain would constantly be overwhelmed. A secondary set of networks activated by the amygdala produces the conscious feelings we know as fear. LeDoux views his work as quite compatible with that of the psychiatric profession and suggests that drugs and therapy are equally valid ways of 'rewiring the brain'.

**Fear Conditioning Studies**

Bruce Kapp and colleagues (1979), in conducting fear conditioning research, have examined changes in heart rate, which a distinguishing aspect of fear. Their investigations began with a focus on the part of the brain stem that controls heart rate in rabbits. Following the nerve fibres back into the brain, they discovered that these fibres led to the amygdala. In particular, they led to a small group of related nerve cells in the amygdala known as the central nucleus. Kapp found that the central nucleus is the part of the brain that instantaneously releases a fear response when an animal encounters a novel situation such as hearing a loud noise. Nerves running out from the central nucleus carry the messages that control such reactions as heart rate, blood pressure, sweating, respiration, freezing, increased startle reaction: all the responses that occur during a fearful experience. In addition, nerve fibres from the amygdala project back into the upper parts of the brain, to regions that control the release of stress hormones to the cortex and to sensory areas. Kapp (1979) concluded that the experience of a threat systematically triggers this 'neural alarm system'.

LeDoux (1996) in fear conditioning experiments with rats, gave animals a tone followed shortly by a mild shock. The animals were then essentially conditioned to experience a fear response to the sound alone. LeDoux attempted to trace the circuit by which the brain converts the sound into a fear response. His research revealed that when conditioned animals hear the tone that precedes a shock, the auditory information travels almost immediately to the amygdala where it 'memorises' the fearful stimulus with

speed and potency. Alternative research by Davis (1992) has mapped out a higher level processing route of fear, one that may mirror the routine processing of fearful information in humans. According to Davis, fearful information passes from the sensor organs and is processed in the cortex before threading down to the amygdala. The proposal of two different neural routes to the amygdala implies that two different kinds of fear-related memory may be formed.

One of the key aspects of 'LeDoux's circuit' is that it does not travel immediately to the cortex, which implies that an individual may experience, learn and unconsciously commit to emotional memory many fearful situations, without ever being aware of what has triggered the physiological response (Goleman, 1996). Perry (1999) has recently suggested that anatomically, the emotional system can act independently of the cortex and has also proposed a model of memory processing where some emotional memories and reactions can be formed without any conscious, cognitive participation.

Recent neuroimaging research may support the idea that fear may be experienced subconsciously. A recent positron emission tomography (PET) study has illustrated in humans, as LeDoux revealed in rats, the possible activation of a fear conditioning route that bypasses the higher cortical areas of the brain (Rauch, van der Kolk, Fisler, Orr, Savage, Fischman, Jenike, & Pitman, 1996). Researchers have reported experiments confirming that individuals can activate their fear circuitry without ever being aware they are doing so. It appears that learning from another's description of a traumatic event may create a second-hand sense of fear, with the amygdala becoming activated following the briefest description of a fearful situation.

**Learning during a Traumatic Situation**

It has been proposed by LeDoux (1998) that during a traumatic situation, conscious memories are formed by a system involving the hippocampus and related cortical areas and unconscious memories are established by fear conditioning mechanisms that

operate through an amygdala based system. When stimuli presented during the initial trauma are later encountered, each system can potentially retrieve its separate memories. For the amygdala system, retrieval results in expression of bodily responses that prepare for danger. For the hippocampal system, retrieval results in conscious recollection.

LeDoux (1998) has suggested that the brain uses a simple but extremely potent method to register emotional memories. The same alerting systems originating in the amygdala that prime the body to react to life-threatening emergencies by fighting or fleeing also strengthen the memory of that event. During heightened stress nerves running from the brain to the adrenal glands triggers a secretion of epinephrine and norepinephrine, which surge through the body priming it for response to an emergency. These hormones activate receptors that carry messages from the brain to regulate heart rate, but they also carry signals back into the brain. The amygdala is the main site in the brain for the recpetion of these signals. The signals activate neurons within the amygdala to signal other brain regions to strengthen memory of what is happening. LeDoux suggests that the more intense the activation, the stronger the memory.

**The Hot System / Cool System Model of Memory**

Metcalfe and Jacobs (1996) have also recently developed a detailed framework of information processing which assumes the operation of two memory systems. They have defined the first system as the 'cool' cognitive system and the second as the 'hot' emotional-fear system. They propose that the 'cool' hippocampal memory system records, in an unemotional manner, well-elaborated autobiographical events, complete with their spatial-temporal context. In contrast, the 'hot' amygdala system records unintegrated fragmentary fear-provoking features of events, which become linked directly to fear responses. The hot system is direct, quick, highly emotional, inflexible, and fragmentary. The cool system is cognitive and complex, informationally neutral, subject to control processes, and integrated (see also Gray, 1982).

Hot-system memories are stimulus-driven and entail a sense of reliving, more like simple responses (often fearful) than recollections (Metcalfe & Jacobs, 1996). Cool-system memories are narrative, recollective and episodic. The individual is aware that the events occurred in his/her personal past. There is no sense of reliving or of mistaking the memory for a current percept. Metcalfe and Jacobs suggest that encoding in the two systems operates in parallel, with the cool system encoding the contextual representation and the hot system contributing a highlighting of the specifically fear-provoking (or emotional) aspects of the experience .

Research by LeDoux (1995) and Davis (1992) indicate that once fear is conditioned, it is virtually indelible, although the connection to the frontal lobes and other cortical regions (parts of what Metcalfe and Jacobs (1996) call the cool system) allows suppression of fear responding. In the hot/cool framework, Metcalfe and Jacobs emphasise these findings, detailing how the cool system and the hot system respond differently to increasing stress. The cool system shows a non-monotonic response to increasing stress, much like the classic Yerkes-Dodson Law (Yerkes & Dodson, 1908). At low levels of stress, mineralo-corticoid receptors in the hippocampus produce an increase in responsivity. However, at higher levels of stress the successive occupation of glucocorticoid receptors, in addition to the mineralo-corticoid receptors, causes the hippocampus to become less responsive, and at extremely high levels, resultantly dysfunctional. In contrast, the hot system shows a simple increase in responsivity to increasing stress, at least within physiological boundaries. Metcalfe and Jacobs suggest that at low levels of stress, both the fear-evoking features (hot) and the contextual and narrative features (cool) of a situation show enhanced encoding with increasing stress (or arousal). At traumatic levels of stress however, the cool system becomes dysfunctional, while the hot system becomes hyper-responsive. Consequently, encoding under such conditions will be fragmentary rather than spatio-temporally bound, replete, and coherent. At increasingly higher levels of stress the individual will more and more selectively engage on the fear-evoking features that are peculiar to the hot system. These

hot features (or triggers) provoke fear reactions and subsequently condition the ensuing reactions, leading to a self-perpetuating traumatic response.

Many biological responses occur as a result of increasing stress, setting off neurohormones that result in the 'fight or flight response' of the sympathetic nervous system. An animal study by Adamec (1991) revealed that increased stimulation of amygdaloid and hippocampal activity consistently accompanied permanent alterations in the limbic physiology, causing lasting changes in defensiveness and predatory aggression. During periods of extreme stress, endogenous opioids were released inhibiting pain during a highly stressful situation. They could also produce a freeze response during the period of stress, which may render an animal unable to 'remember' the situation. Van der Kolk (1997) speculates that it is the secretion of endogenous opioids which assists in the use of the coping mechanism of dissociation. He supports the notion that animal responses to extreme stressors and subsequent research relative to trauma in humans indicate that there are very specific biologic responses that appear to interfere with memory storage.

**Conclusion**

Trauma affects an individual's ability to perceive and integrate an overwhelming experience (van der Kolk, 1997). Metcalfe and Jacobs (1996) have assisted our understanding of traumatic memory by describing it within a framework that assumes the operation of two memory systems, a 'cool' cognitive system and a 'hot' emotional fear system.

During learning, increasing levels of stress appear to negatively affect performance of the hippocampus, providing us with a hypothesis to explain why memory disturbance occurs during a traumatic situation (van der Kolk, 1987a, 1994; van der Kolk & van der Hart, 1991; Squire, 1992; van der Kolk, McFarlane & Weisaeth, 1996). It would appear that

extreme levels of stress debilitate explicit conscious memory and intensify implicit unconscious memories. This in turn leads to unconscious sources of intense anxiety.

While many researchers postulate a process of limbic system dysregulation, it is most probable that these processes are far more complex, requiring integration across multiple levels of analysis. These systems may all interact to result in the cognitive/emotional interaction we call thoughts, feelings and behaviour. As such, this chapter may be appear to be over-simplifying what is a more complex process, but it clearly highlights the strongly influential factor of the dual memory system paradigm in the development of post traumatic stress.

In recent years, research of traumatised individuals has come to demonstrate that high levels of arousal and resultant dissociative responses during a traumatic event can lead to a disorganisation of the experience (see van der Kolk & Fisler, 1995; van der Kolk, 1987a). Bremner and Marmar (1998) have suggested that experiencing dissociation at the moment of a trauma, which occurs as a result of increased arousal, is a self-protection mechanism against the overwhelming nature of the incident. They further suggest that it is also a significant long-term predictor for the ultimate development of PTSD (Marmar et al., 1994). The next chapter will explore the influence of dissociation on people's response to trauma and its role in the development of post-traumatic stress.

# Chapter 4

# The Role of Dissociation

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# The Role of Dissociation

## Introduction

Dissociation may be defined within two main contexts. It can be regarded as a coping mechanism by which individuals attempts to 'remove' themselves from an emotional experience that is too intense or distressing (Spiegel & Cardena, 1991). It can also be seen as a psychological change where the processing of information (incoming, stored and outgoing) is prevented from being integrated with its usual or expected associations (West, 1967). It can reasonably be suggested that these two processes of dissociation occur in parallel: dissociative responses at the traumatic event and the corresponding structural dissociation of memory processes.

Trauma causes disruption to normal cognitive and emotional processes (Maldonado & Spiegel, 1998). The traumatic experience forces the individual to reorganise mental and psychophysiological processes in order to buffer the immediate impact of the trauma (Maldonado & Spiegel, 1994). This reorganisation may take the form of fostering separation from painful surroundings and realities (derealisation) and from the individual's own body (depersonalisation). Even though such defenses may initially be adaptive, directed at maintaining control of at times overwhelming stress, some trauma sufferers develop persistent dissociative, amnestic, and anxiey-like symptoms. The predominant use of this coping mechanism is sometimes considered pathological (Maldonado & Spiegel, 1998).

## Peritraumatic Dissociation

When people are affected by a traumatic incident, they will often report an alteration in their experience of time, place and person, endowing the situation with a sense of unreality (van der Kolk, 1997). Dissociation during trauma may take the form of:

(i) an altered sense of time, with time being experienced as slowing down or rapidly accelerating,

(ii) experiences of depersonalisation; profound feelings of unreality that the event is occurring or that the individual is the victim of the event,

(iii) out of body experiences; confusion and disorientation,

(iv) altered body image or feelings of disconnection from one's body,

(v) tunnel vision,

(vi) altered pain perception, and

(vii) other experiences reflecting immediate dissociative responses to the trauma (Marmar et al., 1998).

These acute dissociative responses have been termed peritraumatic dissociation (Marmar et al., 1994; 1996, Weiss et al., 1995).

Van der Kolk (1997) suggests that it is generally accepted that such dissociation is a normal coping strategy in the face of overwhelming stress. These experiences may be thought of as a form of adaptive dissociation; a self-protection mechanism against the overwhelming nature of the incident. In this process, the person cognitively and/or emotionally distances him or herself from the event.

**Psychological Dissociation**

Dissociation also refers to a disconnection of mental processes that ordinarily function in an integrated way. Elements of an experience are not integrated as a whole but are stored as isolated fragments in the form of sensory perceptions, feeling states or behavioural re-enactments (van der Kolk & Fisler, 1995; Spiegel and Cardena, 1991). It has been suggested by a number of theorists (Bremner & Marmar, 1998; Bromberg, 1994; Spiegel, 1994) that dissociation reflects shifts in states of consciousness across a continuum. These range from 'normal' dissociation such as daydreaming and feeling distant, to DSM-IV classifications such as fugue states, amnesias and the development of Dissociative Identity Disorder (APA, 1994).

### The Negative Impact of Dissociation

As mentioned previously, recent research has hypothesised that experiencing dissociation at the moment of a traumatic event (termed peritraumatic dissociation) is a key predictor of the ultimate development of PTSD (Holen, 1991; Marmar, et al., 1994, 1996a, 1996b; Spiegel, 1994; van der Kolk & Fisler, 1995). Bremner and colleagues (1993) found that Vietnam veterans suffering with PTSD reported experiencing higher levels of dissociative symptoms during combat than men who did not. Koopman, Classen and Spiegel (1994) found that dissociative symptoms early in the course of a natural disaster predicted PTSD symptoms seven months later. A prospective study of 51 injured trauma survivors in Israel, found that peritraumatic dissociation (experiencing dissociation during a traumatic event) explained 30% of the variance in a six months follow-up of PTSD symptoms, over and above the effects of gender, education, age, event-severity, and intrusion, avoidance anxiety and depression (Shalev, Orr, & Pitman, 1993).

Dissociation of an ongoing nature may also occur in traumatised people. People who have learned to cope with trauma by dissociating are vulnerable to continue to do so in response to minor stresses (van der Kolk & Fisler, 1995). The continued use of dissociation as a way of coping with stress, may interfere with an individual's capacity to fully attend to life's ongoing challenges. The severity of ongoing dissociative processes has been correlated with a large variety of psychopathological conditions (Bernstein & Putnam, 1986; Putnam, Loewenstein, Silberman & Post, 1984; Putnam, Guroff & Silberman, 1986).

### The Process of Dissociation

While dissociation may temporarily serve an adaptive function, ultimately the lack of integration of traumatic memories seems to be the critical element in the development of the complex bio-behavioural changes that are classified as PTSD (van der Kolk, 1997). Intense arousal seems to interfere with information processing and the storage of

information into narrative, explicit memory. Christianson (1992) has described how, when people feel threatened, they experience a significant narrowing of consciousness, and remain merely focussed on the central perceptual details. During a traumatic event, this narrowing of consciousness sometimes evolves into amnesia for parts of the event, or for the entire experience. However, while traumatised individuals may be unable to give a clear narrative of the traumatic incident, there may be no difficulty with their implicit memory of the event. They may sense the emotional significance of a stimulus and be aware of associated perceptions, without being able to articulate the reasons for such feelings.

Pierre Janet (1889, in van der Kolk & Fisler, 1995) first described how the central issue in trauma is dissociation. He claimed that the memories of what has happened cannot be integrated into an individual's general experiential schemas and are separated from the rest of personal experience. Physiological hyperarousal seems to be a central precondition for dissociation to occur (van der Kolk, 1997). Lack of integration on a schematic level causes the experience to be stored as affect states or as somatosensory elements of the trauma. These states or elements then return into consciousness when reminders activate customary response patterns resulting in physical sensations (such as panic attacks), visual images (such as flashbacks and nightmares), obsessive ruminations, or behavioural re-enactments of elements of the trauma.

Similar observations have been made by other clinicians treating traumatised individuals. For example, Grinker and Spiegel (1945) noted that some combat soldiers developed excessive responses under stress, which they thought to be responsible for the development of a permanent disorder. They found that fear and anger in small doses was stimulating and alerted the ego, increasing efficacy. However, repeated stimulation due to repeated psychological trauma, heightened the intensity of the emotion until a point was reached at which the ego lost its effectiveness. Grinker and Spiegel describe traumatic amnesias in these soldiers, accompanied by confusion, mutism and stupor.

A recent neuroimaging symptom provocation study revealed interesting findings about traumatic memories (Rauch et al., 1996). When subjects had flashbacks induced in a laboratory, there was significantly increased activity in the areas of the right hemisphere that are associated with the processing of emotional experiences, as well as in the right visual association cortex. At the same time, there was significantly decreased activity in Broca's area in the left hemisphere, the part of the CNS most centrally involved in the transformation of subjective experience into speech. These findings are in line with the previously mentioned results by van der Kolk and colleagues (1995), purporting that traumatic memories consist of emotional and sensory states, with little verbal representation. In other articles, van der Kolk (1997) has hypothesised that under conditions of extreme stress, the hippocampally based memory categorisation system fails, leaving memories to be stored as affective and perceptual states. This is similar to Metcalfe and Jacobs (1995) description of the response of the hot and cold memory systems to increasing levels of stress. Van der Kolk's (1997) hypothesis proposes that excessive arousal at the moment of the trauma interferes with the effective memory processing of the experience, leaving memory traces that may remain unmodified by the passage of time, and by further experience.

## Conclusion

Dissociative processing of a traumatic experience influences the capacity to communicate about the trauma. In some people, the memories of trauma may have no verbal or explicit component at all (van der Kolk & Fisler, 1995), and may be entirely organised on an implicit or perceptual level without any accompanying narrative or story about what happened. When people receive sensory input, they usually synthesise this incoming information into narrative form, without conscious awareness of the processes that translate sensory impressions into a personal story (Reed, 1992). Research by van der Kolk and colleagues (1995) has shown that traumatic experiences are initially recorded as sensations or feeling states that are not immediately transcribed into personal narratives, in contrast with the way people seem to process ordinary information. Van

der Kolk suggests that this failure of information processing on the level in which it is categorised and integrated with other experiences, is the very core of the pathology of PTSD (van der Kolk, 1997).

During a traumatic or critical incident, a defensive process of denial and suppression frequently operates to control a person's feelings and assist them in optimising their performance (Westerink, 1995). However, many studies of people who develop PTSD have suggested that significant prior and/or current evidence of dissociation is not adaptive but rather pathological (Bremner et al., 1993; Marmar et al., 1994). The next chapter will explore a number of other factors that may contribute to post trauma psychopathology.

# Chapter 5

# Other Contributory Factors

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# Other Contributory Factors

## Introduction

PTSD was originally conceptualised as a direct consequence of exposure to a traumatic event in otherwise normal individuals (Halligan & Yehuda, 2000). In this model, emphasis was placed on establishing the importance of the etiologic agent, i.e. the traumatic event, rather than exploring individual vulnerability factors. It is now clear that an individual's reaction to trauma will depend on many other factors (Hamling, 1996). Influential pre-incident factors include a history of adverse life events, past psychiatric disorders, level of training, experience with similar events, and time for planning. Event-related factors include the extent of the disaster in terms of size and duration, the level of personal threat (Southwick & Yehuda, 1997), and experiencing peritraumatic dissociation (Bremner & Marmar, 1998). Finally, post-incident factors include the availability of support systems (Solomon & Smith, 1994), and the adjustment time available before being involved in another incident.

## Individual Vulnerability Factors

The observation that trauma is not a necessarily sufficiently strong determinant of PTSD raises the possibility that there may be many risk factors that account for an individual's vulnerability to developing this disorder (Yehuda & Antelman, 1993). Breslau and colleagues (1997) noted several demographic factors that affect the risk of traumatic exposure, including gender, age, socio-economic status and ethnicity. A consistent finding of PTSD research has been that the prevalence of PTSD is almost twice as high in women as it is in men (Halligan & Yehuda, 2000). Halligan and Yehuda concluded that there is no clear explanation for this finding, although gender (being female) is also a risk factor for the development of other psychiatric disorders. Breslau and colleagues (1997) found that the higher risk for PTSD in females is probably due to their vulnerability to assaultive violence.

A variety of other risk factors have been investigated, including:

(i) genetic risk factors (McFarlane, 1990; True, Eisen, Heath, Goldberg, Lyons & Nowak, 1993),

(ii) history of family instability (Breslau et al., 1991; Davidson, Swartz, Storck, Krishnan & Hammett, 1985),

(iii) the individual's personality (Southwick, Morgan, Nagy, Bremner, Nicholaou, Johnson, Rosenheck & Charney, 1993; Schnurr, Friedman & Rosenberg, 1993),

(iv) history of prior trauma (Davidson et al, 1991; Bremner et al., 1993; Zaidi, 1994),

(v) past history of behavioural or psychological problems (Helzer et al., 1987),

(vi) nature of parental relationships (Emery et al., 1991), and

(vii) individual factors, such as level of education, income level and previous experience of divorce or death of spouse (Halligan & Yehuda , 2000), and other life events at the time of the trauma (McFarlane, 1989).

Other investigations have explored post trauma factors such as level of social support (Solomon & Smith, 1994) and exposure to subsequent reactivating stressors (Yehuda et al., 1995; Solomon and Prager, 1992). There has been an increasing exploration into these issues in recent years that has suggested that some vulnerability factors exert their effects at relatively low thresholds (Resick, Kilpatrick, Best & Kramer, 1992), whereas others come into play only at a relatively high level of exposure (McCraine, Hyer, Boudewyns & Woods, 1992). To date, it is unclear whether the risk factors for PTSD suggest a specific predisposition to PTSD, or if they reflect a general predisposition to mental illness that is triggered by adversity (Yehuda & McFarlane, 1995).

**Differentiating Stress and Trauma**

The importance of recent prospective studies appears to lie in the questioning of the idea that PTSD is a continuation of the 'normal' stress response. The heterogeneity of acute stress responses appears incompatible with Horowitz's (1986) model of symptom formation in PTSD. It implies that certain acute responses to trauma may be adaptive, as opposed to others that may be maladaptive and result in psychological disorder. Emerging data appears to challenge earlier ideas relating to the homogeneity and universality of the early response to trauma and raise the possibility that the emergence of chronic symptoms may be predicted by discrete biological and psychological features of the acute response to trauma.

Longitudinal studies have provided valuable information about the normative process of response to stress, the factors that might modify this process, and patterns of dysregulation (Blank, 1993). In particular, prospective studies of the general community have allowed a more systematic examination of Horowitz's influential formulation, that following a traumatic event there is a process of oscillation between the states of intrusion and avoidance that is part of the normal process of integrating an experience of extraordinary magnitude (Horowitz, 1986).

Horowitz's 1986 model, which has been considered to be one of the major ideological bases for PTSD, implied that the symptoms of PTSD are a continuation of the normal acute traumatic phenomena or, rather, the failure of restitution of this process (Brett & Ostroff, 1985). An implicit prediction of this model is that the severity and chronicity of symptoms would be proportional to the magnitude of the trauma. Although many studies have supported the view that the intensity of the trauma has a bearing on severity and chronicity of PTSD symptoms (Horowitz, 1986; Pynoos, Frederick, Nader, Arroyo, Steinberg, Eth, Nunez & Fairbanks, 1987; Foy, Sipprelle, Rueger & Carroll, 1984; Yehuda, Southwick & Giller, 1992), other studies have highlighted the complexity of this

relationship and its lack of predictive power (Davidson et al, 1991; McFarlane, 1989; Bremner et al., 1993; McFarlane, 1990; Blank, 1993; Yehuda et al., 1992).

Recent prospective epidemiological studies have given rise to the suggestion that the acute stress response may be quite different in individuals who develop PTSD to those who do not (Shalev, 1994). For example, in a study of the survivors of a terrorist attack on a bus, Shalev (1992) failed to demonstrate that the early intensity of the intrusive affects and cognitions related to longer-term outcome. A second study of train drivers involved in fatal accidents similarly demonstrated that the pattern of hyperarousal did not emerge simultaneously with the intrusions and that avoidance patterns developed after an initial delay (Karlehage, Malt & Hoff, 1993). Another study demonstrated that the symptom profile that emerges within two weeks following a traumatic event may be quite different from that observed at three-month follow-up (Rothbaum, Foa, Riggs, Murdock & Walsh, 1992). These observations imply that the intrusive phenomena in the immediate aftermath of a traumatic event may substantially differ from those that occur three to four months post trauma or those that occur more chronically (McFarlane, 1992b). Thus it appears that the passage of time may be required before a differentiation emerges between normal stress response and psychological disorder.

**Co-morbidity**

The presence of psychiatric co-morbidity is a complex issue. The relative rareness of 'pure PTSD' (i.e., a term that denotes a disorder uncomplicated by the presence of symptoms of other psychiatric disorders), compared to the presence of more complex forms, suggests that traumatic stress may precipitate a whole host of symptoms and conditions. As such, the emergence of PTSD following exposure to a trauma may represent the manifestation of an underlying syndrome rather than a normative adaptation to environmental challenge (van der Kolk, 1997).

Psychiatric co-morbidity poses a problem for conceptualising PTSD as a normative stress response and also for diagnosing PTSD. The prevalence of co-morbid psychiatric conditions has been investigated in a number of traumatised groups with PTSD. Studies have found that anywhere from 50% to 90% of individuals with chronic PTSD also meet diagnostic criteria for another psychiatric disorder including substance abuse (Freedy et al., 1992; Kulka et al., 1990). Recent studies of community samples have also demonstrated high rates of comorbidity in both disaster survivors and the general community (Green, Lindy, Grace & Leonard, 1992). In general, psychiatric co-morbidity appears to develop over time in traumatised individuals with PTSD. In a study by North, Smith, and Spitznagel (1994) of the victims of a mass shooting, rates of co-morbidity one month after the trauma were much lower than those in other populations studied. Thus, there may be a cascade in the months following the onset of PTSD that suggests the unfolding of a secondary psychopathological process. Nevertheless, the findings suggest that it is the exception rather than the rule for individuals to meet the diagnostic criteria for PTSD in the absence of meeting the criteria for another psychiatric disorder (Friedman & Yehuda, 1995).

**Individual Variance and Complexity**

One difficulty that appears specific to trauma research is that traumatic events frequently 'stir-up' unresolved, emotionally similar, but often logically unrelated, incidents from an individual's past. These apparently associated memories, some previously forgotten can enhance the trauma response (e.g., arousal, flashbacks) or increase motivation to avoid the whole, much larger, issue (van der Kolk, et al., 1995a). In addition, there is evidence that chronic emotional trauma has the potential to cause permanent physical damage in at least the hippocampus. Sapolsky (1990) argues that chronic stress is a significant cause of aging in several species. If there are sub-types within PTSD, they may relate to variations in the capacity to recover from stressful events and a history of chronic stress may diminish this capacity cumulatively. Therefore, aside from the clinical difficulties of possible emotional differences in trauma victims, there may be differences in a person's

physical ability to perceive or recover from stress (Sapolsky, Krey & McEwen, 1984; Goldstein, 1995; Yehuda, Kahana, Schmeidler, Southwick, Wilson & Giller, 1995).

## Conclusion

Section 1 began with a definition of trauma and an exploration of a number of theoretical models that attempt to explain it. It revealed that there are a number of ways of interpreting and diagnosing trauma that have resulted from ongoing and developing psychological and biological research. Some models may be preliminary in nature and leave many puzzles of PTSD unexplained. For example, the delayed onset of PTSD, the impact of mediating variables, and individual differences have not been addressed by most of these models (Calhoun & Resick, 1993).

The risk factors that have been reviewed in these chapters have all been treated relatively equally. Obviously, some studies are better than others. It may be suggested that those studies, which include only people who have developed PTSD or other psychiatric outcomes, are unlikely to be comprehensive studies because of their restriction in the range of outcomes. In particular, there may reason to question whether peritraumatic dissociation would add in a statistically significant way to the prediction of PTSD observed in these studies.

The issue that is raised by the demonstrated role of vulnerability and other contributory factors is that psychological disturbance following trauma is neither a random process nor an outcome entirely predictable by the nature of the traumatic event. This observation appears to call into question the most fundamental assumption of PTSD as potentially occurring in any individual as a result of exposure to a traumatic event (Yehuda & Antelman, 1993). Researchers are still discovering the risk factors for developing psychological disorder following exposure to a traumatic stressor and consequently designing effective techniques for reducing their impact and assisting recovery. Section 2 will explore some of these techniques that may assist in the

treatment of and recovery from trauma, focussing in particular on psychological debriefing.

## *SECTION 2*

## *RECOVERY: A PSYCHOLOGICAL PROCESS*

*"What cannot be talked about can also not be put to rest" Bruno Bettleheim*

# Chapter 6

# Treatment and Recovery

# Chapter 6

# Treatment and Recovery

## Introduction

Bruno Bettleheim, an early trauma investigator noted that "What cannot be talked about can also not be put to rest" (Bettleheim, 1984, p166). Work late last century by Pierre Janet recognised the link between the patient verbally reconstructing and expressing the traumatic event, and successful recovery (see van der Hart, Brown, & van der Kolk, 1989). Mitchell and Everly (1998) suggest that it is almost universally accepted within the crisis responses literature that recovery from trauma is founded upon the verbal expression of cognitions and emotions relevant to the traumatic event. In their review of crisis psychiatry, Spiegel and Classen (1995) note the importance of cognitively processing the crisis. Pennebaker and colleagues in a series of experiments have demonstrated the value of expression (Pennebaker 1985, 1990; Pennebaker and Beall, 1986; Pennebaker and Susman, 1988). Their investigations have demonstrated the value of expression on psychological, physiological and behavioural outcome measures.

Trauma affects an individual's ability to integrate an overwhelming experience (van der Kolk, 1997). A widely supported aim of therapy for traumatised individuals according to van der Kolk is to help them move from 'being haunted by the past experience' (subsequently interpreting emotionally arousing stimuli as a return of the trauma), to being present in the here and now, capable of responding to current exigencies to their fullest potential. Little controlled treatment research has been conducted with individuals or populations that experience trauma. However, there have been a variety of therapeutic approaches advocated for PTSD. There are a number of comprehensive reviews of the most prominent treatments for PTSD including psychodynamic therapy (Marmar, et al., 1993), cognitive-behavioral therapy (Foa, et al. 1995), pharmacotherapy (Friedman & Southwick, 1995), group, family, couples, and inpatient treatment (Williams & Sommer, 1995), and treatment for patients dually diagnosed with PTSD and alcoholism/substance

abuse (Kofoed, et al., 1993). This chapter will focus on the psychological approaches of Bessel van der Kolk and Judith Herman (two key internationally renowned trauma clinicians and researchers), to the treatment of psychological trauma.

**The Development of Trauma**

When an individual learns to be frightened by something through fear conditioning, the fear ordinarily subsides with time (Goleman, 1996). This seems to occur through natural relearning, as the feared object is re-encountered in the absence of anything disturbing. In PTSD, this organic relearning fails to occur. Charney and colleagues (1993) propose that this may be due to the brain changes that occur with PTSD. The changes are so strong that, in effect, a full-blown fight or flight response occurs every time something even vaguely reminiscent of the original trauma is encountered. This in turn, Goleman (1996) suggests, strengthens the fear pathway so that there is never a time when what is feared is paired with a feeling of calm. The amygdala fails to 'relearn' a milder reaction. However it appears that strong emotional memories and the reactions they trigger can change over time. This relearning, Charney and colleagues (1993) propose, is cortical. The original fear ingrained in the amygdala does not disappear completely. However, the prefrontal cortex actively suppresses the amygdala's command to the rest of the brain to respond with fear.

**Treatment**

Therapists working with trauma patients have framed therapy into three key phases (van der Kolk et al., 1995b; Herman, 1992; Lindy, 1985, 1993):

(i) establishing trust, safety, and earning the right to gain access to carefully guarded traumatic material,

(ii) trauma-focused therapy; exploring traumatic material in depth, while limiting intrusive recollections with avoidant/numbing symptoms, *and*

(iii) assisting the individual to disconnect from the trauma and reconnect with family, friends, and society.

It would appear that not all individuals who experience trauma require treatment. Many are able to deal with their experience(s) with the support of family and friends. Severe traumatic experiences rarely leave the individual untouched however, and many benefit from professional help in recovering from the effects of such exposure. As a general rule, the sooner traumatised individuals receive treatment, the more likely they are to recover (The National Centre for PTSD (NC-PTSD), 1998)

**The Approach of Bessel van der Kolk**

Van der Kolk and colleagues (van der Kolk et al., 1995b) propose that the aim of the therapy is to help the traumatised individual to move from being dominated and haunted by the past to being present in the here and now, capable of responding to current situations with his or her fullest potential.

***Trauma***

Krystal (1968a) first noted that in people with PTSD, emotions seem to lose much of their alerting function. Dissociation is set up between emotional arousal and goal directed action. It was argued that because traumatised individuals lose the capacity to interpret the meaning of their emotional arousal, it in turn becomes useless as a current signal. Unable to interpret the meaning of their emotional arousal, people with PTSD often endow their feelings with a negative value. Although normally the function of emotions is to alert people to the occurrence, significance, and nature of subjectively significant events (Krystal, 1968a, 1968b), for a traumatised individual they appear to merely become reminders of one's inability to affect the outcome of one's life (van der Kolk et al., 1995b). Therefore, apart from the concrete (usually visual) reminders of the trauma, feelings in general come to be experienced as traumatic reminders and are generally avoided (van der Kolk et al., 1995b). Unable to neutralise feelings with adaptive action, traumatised people tend to experience their emotions as somatic states (van der Kolk et al., 1995b). Thus, people with PTSD tend to somatise (Saxe et al.,

1994,) or to discharge their emotions with actions that are irrelevant to the stimulus that precipitated the emotion. This may result in aggressive actions against self or others (van der Kolk & van der Hart, 1991).

When the disorganising intrusions can be understood as failures of integration of traumatic experiences into the totality of one's life, the individual is in a position to recognise seemingly overwhelming affective experiences as the actual reliving of past terror. This can aid the process of integration by providing a perspective that the suffering is meaningful, and by helping in the mastery of trauma through putting the experience into symbolic, communicable form, such as words, thoughts, and feelings (van der Kolk et al., 1995b).

### *Treatment*

For van der Kolk, deconditioning of traumatic memories and responses consists of controlled activation of the traumatic memories and corrections of faulty traumatic beliefs (van der Kolk et al., 1995b). The critical issue is to introduce the capacity to remember the trauma in a manner that allows change. In order for this to occur, some new information that is incompatible to the traumatic memory must be introduced (Foa, Steketee & Rothbaum, 1989). The most important new information is the fact that the person is able to confront the traumatic memory in a safe environment (van der Hart & Spiegel, 1993). In order to help a person regulate emotional arousal, secure attachment may be even more important than evoking the traumatic memories. The critical issue in treatment is to expose the person to an experience that contains elements that are sufficiently similar to an existing traumatic memory in order to activate it and, at the same time, for it to be an experience that contains aspects that are incompatible enough to facilitate a changed response to it. This could be achieved for example, by experiencing a traumatic memory in a safe and controllable environment and thus being able to evoke a traumatic image without feeling overwhelmed by the associated emotions (van der Kolk et al., 1995b). It is generally assumed that once all relevant elements of the total

traumatic experience have been identified and thoroughly and deeply examined and experienced in the therapy, successful synthesis will take place (Resick and Schnicke, 1992).

**The Approach of Judith Herman**

Judith Herman (1992) assumes the first step in recovery from trauma (regaining a sense of safety) translates to finding ways to calm the fearful, easily triggered emotional circuits enough to allow relearning. Often this begins with helping people understand that their jumpiness and nightmares, hypervigilance and panics, are part of the symptoms of PTSD. This understanding appears to make the symptoms themselves less frightening. Another early step in the recovery from trauma is to help people regain some sense of control over what is happening to them, a direct unlearning of the lesson of helplessness that the trauma itself imparted. The sense in which individuals with PTSD feel unsafe goes beyond fears that dangers lurk around them. Herman suggests that their insecurity begins more intimately, in the feeling that they have lost control over what is happening in their body and to their emotions. This is understandable, given the hair trigger for emotional reactivity that PTSD creates by hypersensitising the amygdala circuitry. Medication and relaxation techniques offer ways to restore an individual's sense that they no longer need not be at the mercy of the emotional alarms that flood them with inexplicable anxiety; keep them sleepless, or cause nightmares (Herman, 1992).

A further step in healing involves retelling and reconstructing the story of the trauma in the protection of that safety, allowing the emotional circuitry to acquire a new, more realistic interface with and response to, the traumatic memory or triggers (Herman, 1992). The pace of retelling is delicate, ideally mimicking the pace that occurs naturally in those who are able to recover from trauma without suffering PTSD. In the process of natural recovery there often seems to be an inner clock that 'doses' the sufferer with intrusive memories that relive the trauma, interspersed with weeks or months when they remember hardly anything of the frightening events.

This alternation of immersion and respite seems to allow for a spontaneous review of the trauma and relearning of a more normal emotional response to it. The therapist encourages the person to retell the traumatic events as vividly as possible. This includes not just the specifics of what they saw, heard, smelled and felt, but also their reactions - their dread, disgust, nausea and so forth. The goal here is to put the entire memory into words. This means capturing parts of the memory that may have been dissociated and absent from conscious recall. By expressing sensory details and feelings in verbal form, memories are thought to be brought under the control of the cortex, where the reactions they kindle can be rendered more understandable. The emotional relearning at this point is largely accomplished through reliving the events and their emotions; this time in surroundings of safety and security and in company of a trusted clinician.

Finally, Herman (1992) finds that PSTD sufferers need to mourn the loss the original trauma brought to their lives. The mourning that ensues while retelling such painful events serves a crucial purpose. It marks the ability to let go of the trauma itself to some degree. It is as if the constant recycling and reliving of trauma's terror by the emotional circuitry can be lifted. After-effects or occasional references of symptoms persist, says Herman, but there are specific signs that the trauma has largely been overcome. These include reducing the physiological symptoms to a manageable level, and being able to bear the feelings associated with memories of the trauma.

**Conclusion**

After a trauma, which may confront people with their own vulnerability, life may never be exactly the same. The traumatic experience often becomes part of a person's life. Understanding exactly what has happened and sharing one's reactions with others can make a great deal of difference to a person's eventual adaptation (van der Kolk et al., 1995). Putting the feelings and cognitions related to the trauma into words appears to be essential in the treatment of post-traumatic reactions.

Bessel van der Kolk's and Judith Herman's views of trauma recovery appear to be consistent with the 'Mitchell model' of Critical Incident Stress Debriefing (Mitchell & Everly, 1993) which emphasises the group participants' processing of the event. After an introductory period where the rules and the role of the leaders are explained, the facts of the critical incident are established. A discussion of the thoughts of the group members, when they arrived at the incident is undertaken. The third step is a discussion of the full range of emotions and reactions that may have been stimulated by the event. This is followed by an exploration of any PTSD-like symptoms that may be present and concludes with the teaching strategies for coping with subsequent stress from the event and for preparing for return to work. This process of psychological debriefing will be explored in detail in the next chapter.

# Chapter 7

# Psychological Debriefing

# Chapter 7

# Psychological Debriefing

## Introduction

Most mental health communities have now adopted psychological debriefing as part of their coordinated disaster response programs. Although specific occupational groups such as police, fire and ambulance personnel, health care providers, and rescue workers, were originally targeted for psychological debriefing, its use has become increasingly widespread among civilian populations (van der Kolk et al., 1995a).

Debriefing is generally understood to refer to group intervention following a traumatic incident, where the participants review the major elements of the incident. It has been recommended as a stress management technique suitable for groups exposed to traumatic events and has been practised by many emergency organisations (Dunning, 1995; Raphael, 1986; Mitchell, 1983). The goal of this crisis intervention technique is the resolution of the immediate crisis and a restoration of the person to prior level functioning. Although there are several models of psychological debriefing, they all revolve around the individual describing the traumatic experience, their reactions and emotions, and beginning to integrate and master relevant features of the experience (Shalev, 1994).

Systematic efforts to prevent post-traumatic stress (also termed critical incident stress) emerged in the mid-1980's with the early work of Jeffrey Mitchell (1983). Mitchell described a semi-structured group intervention with emergency personnel which he termed Critical Incident Stress Debriefing (CISD). At the time, psychological debriefing was designed to prevent, or at least inhibit, critical incident stress by encouraging participants to recount their traumatic experience while focusing on related facts, thoughts, feelings, and reactions. Thoughts and feelings were normalised as far as possible and individuals were provided with information regarding possible future

emotional reactions and appropriate mental health resources should they require them in the future (Dyregrov, 1989; Rose & Bisson, 1998).

CISD was initially described by Mitchell (1983) as "either an individual or group meeting between the rescue worker and the caring individual (facilitator) who is able to help the person talk about his feelings and reactions to the critical incident"(p. 37). Some conceptual confusion arose because Mitchell initially used the term debrief for individual contacts although subsequent articles referred to CISD as solely a group process (Mitchell & Everly, 1996). Dyregrov (1989) presented the following definition: "A psychological debriefing is a group meeting arranged for the purpose of integrating profound personal experiences both on the cognitive, emotional and group level, and thus preventing the development of adverse reaction" (p.25). Dyregrov further suggested that for debrief to achieve their aims:

(i) it should be undertaken shortly after the event,

(ii) the leader of the group should be well trained and experienced,

(iii) the group must have experienced a common stressor,

(iv) there must be sufficient time to allow a thorough review of all the phases, and

(v) the meetings should be used to identify those who may need additional support.

Dyregrov (1997) provided a detailed analysis of the many factors he believes influence the debriefing process and its ability to achieve its purpose.

**Past and Present Forms of Debriefing**

Debriefing as a term originated in military settings. Before a military operation, personnel were 'briefed' about the situation and the objectives of the operation. When the personnel returned, they were 'debriefed' i.e. they reported on the operation as they experienced it. These operational debriefs were the basis for further military planning (Shalev, 1974, 1994; Shalev, Peri, Rogel-Fuchs, Ursano & Marlowe, 1998). Today the

term debriefing is still used in the armed forces to refer to operational debriefing, but in the wider sphere it is mainly used to refer to psychological debriefing.

Combat stress has been observed and recorded in the military forces since the 7th Century BC (Mitchell & Everly, 1993). Unfortunately, little was understood about traumatic stress or its treatment. Prior to World War I, symptoms of combat stress were generally left untreated. Instead of treatment, many soldiers were ridiculed, imprisoned or possibly killed for their cowardly and traitorous actions. Dramatic changes in the methods of warfare had occurred by the time of World War I. Technology and tactics had evolved, and a widespread enemy became more apparent in twentieth century warfare. As a result, large numbers of psychiatric casualties were encountered during battles (Holmes, 1985). In World War I, most military authorities were unsympathetic to stress responses (shell shock) in armed personnel, and the limited support services provided were in the form of one-on-one psychiatric interventions (Mitchell & Everly, 1993).

In World War II military authorities had accepted that the consequences of earlier practices were very severe and long term, and they needed to be more adequately addressed. Nearly 10% of battle casualties in World War II were psychiatric in nature, with some units experiencing continued combat operations sustaining very high psychiatric casualty rates (Mitchell & Everly, 1993). Late in the war, the military had developed some basic psychiatric intervention principles which had an enormous impact on lowering the rate of combat stress casualties, from 20% during the European invasion in 1944 to 8% in April/May of the following year (Holmes, 1985). During the Normandy invasion of World War II, rudimentary, unstructured 'debriefings' were performed on the beaches during the D-Day operations. Psychiatrists would sit with groups of soldiers and let them talk about their experiences. Those participants who were given the opportunity to ventilate were found to be more alert and ready for battle the next day. It was also found that the greater the delay of intervention, the less likely it was that the soldiers would return to military duties (Mitchell & Everly, 1993).

**The Work of S.L.A. Marshall**

Marshall, a U.S. army historian, developed a specific form of group debriefing for soldiers following combat exposure during World War II (see Shalev, 1994). Although the aim of the debriefs was to gather historical information about the battles etc, according to Marshall it resulted in profound psychological changes among the soldiers that were debriefed (Shalev, 1994; Shalev et al., 1998). His main interest was in small unit performance in ground combat, but he was also interested in the psychological factors that enabled people to maintain integrity. Marshall advocated that a soldier's capacity to overcome his fears depended strongly upon his ability to feel the presence of other personnel and maintain a sense of group belonging, often in circumstances where the enemy, his colleagues and sources of danger were all hidden. Marshall was also aware that an individual was often unable to identify and make sense of the overall pattern of a combat event, and that the historical truth of combat could only be accessed through reconstruction of group narratives.

The debriefing sessions took place on the battlefield as soon as possible after the action. Prior to the debriefing session, Marshall ascertained the outline of the battle, the role played by the unit to be debriefed and any other technical information that would assist in analysing the material discussed in the group. Debrief sessions commenced with outlining the procedures and goals to the group. It's task was to describe the combat in complete detail and, in turn, the aim for the army was to learn from the group's experience. Participants were encouraged to share their experiences with the group. For the duration of the debrief, military ranks were set aside, and testimonies were weighted according to their relevance to developing an understanding of the operation. After a short period of Marshall leading the debrief, company commanders took over, but were monitored to refrain from teaching or expressing opinion on a soldier's conduct (Shalev, 1994; Shalev et al., 1998).

The reconstruction of the battle followed a strict chronological path. This helped the group to focus on factual information rather than interpretation. All available information at each stage of the battle was collected. Although Marshall was mainly interested in the facts of the event, he did gather information on soldier's thoughts and feelings at specific times in battle, and decisions and actions that followed. Marshall warned not to discard any testimony or confront any participant with disbelief. He could see that contradictory statements led to encouraging further clarification. Maintaining the integrity of the process was preferable to establishing a definite version of the events. Marshall's debriefing sessions were to be limited only by the time it took to achieve the desired result, until the whole picture was obtained. This attitude encouraged a group process characterised by an openness of communication and a lack of pressure (Shalev, 1994).

Marshall considered the process fairly simple, although he recognised the need to deal with the possibility of group resistance (Shalev, 1994). He described the group process as opening with an atmosphere of caution and progressing toward greater participation. Although Marshall's primary aim was to gather a clear and precise history of an event (i.e. the battle), he also recognised the psychological benefit of this group process to the men. The process led to emotional relief amongst the soldiers who were interviewed about their experiences. Although Marshall did enquire about participants' emotions, he did not require them to elaborate upon them.

There are a number of elements of Marshall's debriefing technique that are similar to other forms of debriefing (Shalev, 1994):

(i) the timing of the intervention,

(ii) the preparation for the session,

(iii) the temporary suspension of some institutional rules,

(iv) the cognitive reconstruction of the event,

(v) tolerance for ambiguity,

(vi) the integration of grief reactions,

(vii) the use of non-professional yet natural leaders, *and*

(viii) handling resistance to the process.

These elements are addressed to some degree by most forms of debriefing, and affect the progress and outcome of the intervention.

**Critical Incident Stress Debriefing (CISD)**

Of the several models of psychological debriefing (Mitchell, 1983, 1988; Raphael, 1985), the best known and the most widely scrutinised is the 'Mitchell model' of Critical Incident Stress Debriefing (CISD) (Mitchell, 1983). CISD is a debriefing model developed by Jeffrey Mitchell (1983) designed to assist emergency services personnel deal with severely stressful situations including being witness to death or serious injury of colleague, deaths of children, and multiple fatalities (Robinson & Mitchell, 1993).

The CISD model emphasises the participant's processing of the experience within a cognitive-affective-cognitive framework and is designed to facilitate psychological closure of a traumatic event (Mitchell & Everly, 1993). The goals of CISD are to reduce the impact of a traumatic event and accelerate the normal recovery process. Ventilation, mobilisation of social support, as well as education and identifying symptomatic individuals are suggested as major factors in the process (Mitchell & Everly, 1998). The debrief emphasises educational and informational elements in order to assist participants to understand and deal with their stress reactions. The process seeks to restore participant's sense of self-mastery, as well as their sense of meaning in life, and to stabilise the situation and provide relief from stress symptoms. It is also cited as a useful tool for identifying members of the group who may need follow-up support, such as referral to a psychologist.

Within the CISD framework, a critical incident is defined as any event with sufficient immediate or delayed impact to produce significant emotional reactions in people and in addition, an event that is considered generally outside the range of ordinary human

experiences (Mitchell and Everly, 1993). CISD was evolved to assist personnel deal with the most stressful of events and was designed to be applied to events which are extraordinary.

A Critical Incident Stress Management (CISM) team typically consists of twenty to forty personnel, with roughly one third of the membership made up of mental health professionals and the remainder peer support personnel who are drawn from the emergency services organisations. From this pool of members, a response team of three to four personnel is drawn to provide an actual debriefing. Mitchell and Bray (1990) declare that the major purposes of the CISM teams are to:

(vi) prepare personnel to manage their job-related stress, *and*

(vii) assist personnel who are experiencing the negative effects of stress after exposure to a critical incident, with the objective of their early return to operational duty.

The debrief is lead by a mental health professional and several peer support personnel and typical lasts about two to three hours. Mitchell and Bray further suggest that the formal CISD process will achieve its best results when it is offered after 24 hours and before 72 hours following a critical incident.

**CISD Process**

The CISD protocol consists of seven distinct phases (Mitchell & Bray, 1990).

*1. The Introductory Phase.*

This is where the team leader introduces the process, encourages the group's participation and sets the ground rules.

*2. The Fact Phase:*

The group is asked to describe their work role during the incident and from their own perspective, the facts in regard to what happened. Participants find this is a relatively

easy phase since the facts are always easier to discuss than a person's reactions to an event. The fact phase recreates the event for the participants.

3. *The Thought Phase.*

Participants are asked to discuss their first thoughts during the event. This stage explores the more personal aspects of the situation, and is seen as a transition phase. Personal thoughts often get hidden behind the facts and bringing them into the open establishes that an individual's own thoughts are important.

4. *The Reaction Phase.*

This phase is designed to move participants from a predominantly cognitive level to a more affective or emotional one. It explores both the cognitive and emotional levels of processing experiences. Participants are asked to describe the worst aspects of the event and how they reacted to the event, in order to shift them from a cognitive to an affective level of processing. One outcome for this phase is for participants to recognise that it is acceptable for them to have their own thoughts and feelings about the event.

5. *The Symptoms Phase.*

This phase begins a movement back to a more cognitive processing level, and is a transition phase similar to the thought phase. Participants are asked to describe the cognitive, physical, emotional and behavioural symptoms/signals of distress they may have experienced since the event.

6. *The Teaching Phase.*

Once the signals of distress have been discussed, the teaching phase explores ways of alleviating them. This phase attempts to normalise these reactions, and provide participants with stress management techniques.

7. *The Re-entry Phase.*

This is the 'wrap-up' phase in which any additional questions or statements can be presented to the group. Sometimes the CISD team may suggest things that people could not or would not say during the debriefing, such as feelings that were too difficult to verbalise. The leaders make a summary statement to the group. Participants are then given handouts including information sheets about the signs and symptoms of critical incident stress. Follow-up phone numbers of CISD team members are provided for participants to contact if they wish to.

Immediately following a debrief, CISD team members make themselves available to the group for individual contacts and additional questions. They may also seek out those participants who appeared to be having the most difficulty in the debrief, and provide them with advice, reassurance and possibly referral to a mental health professional. The last step for the debriefers is to decide what follow-up steps may be necessary and to allow them to debrief about how the debriefing process affected them, to let them process their emotions. Follow-up services are believed to be extremely important. They usually begin within 24 hours of the debriefing. Telephone calls are made, request for referrals are fulfilled, individuals or groups may be checked on and supervisors may be given general advice on how best to care for their distressed personnel. In some instances a second debriefing may be necessary (Mitchell & Bray, 1990).

**Other Debriefing Models**

Beverley Raphael (1986, 1991) developed guidelines for debriefing teams of helpers following the Granville rail disaster. In the debriefing session, participants explored their experiences of the disaster and their responses to it. Raphael began with the participant's introduction to the event, their first knowledge of the event, and their preparedness, training and past experience that may have influenced their perception of the current event (Everly & Mitchell, 1997).

Participants' personal experience of the disaster, their role and their reactions were examined. Both negative and positive experiences and feelings were explored in order to provide a balanced perspective of the event, and to allow the participants to find satisfaction in the things they did well, even in the face of guilt or anger. Relationships to other workers, victims and the impact of the event on family and friends were explored. Emphasis was then placed on disengaging from the experience and making the transition back to everyday work life while at the same time assessing what could be learnt from the event for future incidents. The goal of this debriefing model is primarily preventative, to assist workers in dealing with the inevitable stressors that will arise as a result of the event. "The experience is given a cognitive structure and the emotional release of reviewing helps the worker to a sense of achievement and distancing" (Raphael, 1986, p.286).

Other reports of psychological debriefing are generally similar to Raphael's or Mitchell's model (see Shalev, 1994). Dyregrov (1989, 1997) studied the process variables in the Mitchell model, focussing on the decision-making process of the participants during the thought stage. The Dyregrov model adds a stage of sensory impressions of the incident to improve understanding and processing of the experience, and places emphasis on the normalisation of reactions and responses.

**Critical Incident Stress Management (CISM)**

CISD was designed not as a stand-alone process but part of a broad-based intervention system (Mitchell & Everly, 1993; Mitchell & Everly, 1998) to support the needs of emergency services personnel. Recently, Mitchell and Everly (1998) have integrated this system into a comprehensive crisis management program named Critical Incident Stress Management (CISM). The term CISM was used to reinforce the concept that CISD was not a stand-alone process but a component of a broader program.

The original CISD approach has been expanded to encompass the management of stress in personal as well as work settings (Mitchell and Everly, 1998). Under this model, interventions now fall into three categories: interventions for the individual, interventions for groups, and interventions for the environment. The core components of the interventions for groups are:

*1. Pre-Incident Education*

Stress education courses are designed to be instituted early in organisations, along with ongoing in-service education sessions. They involve psychological preparedness training: to set appropriate expectations for actual events, to increase cognitive resources relevant to a crisis and teach behavioural stress management and personal coping strategies.

*2. On-Scene Support*

Peer support personnel play a key role in providing on-scene support services to distressed personnel, advice to command staff as the situation warrants and brief assistance to victims and their family members to reduce interference with operations.

*3. Demobilisations*

This intervention is for large-scale events and take place at a location away from the scene. Personnel are ordered to attend the centre following completion of their work at the scene. The process involves approximately ten minutes of provision of stress information and twenty minutes allocated to feeding and resting the crews. It allows personnel to get education on stress symptoms and how to deal with them, a place to rest and recooperate, and some initial ventilation of feelings either individually or as a group.

*4. Defusing*

Defusings are an abbreviated, less formal version of debriefing. They are given within a few hours of an event, up to about 12 hours afterwards. This rapid intervention, lasts

approximately 30 to 45 minutes, and is typically managed by peer support personnel. Its main purpose is to stabilise personnel, so that they can return to normal duties or they are allowed to go home without undue stress if they are at the end of their shift. Defusing concentrates on the most seriously affected workers and allows for a little initial ventilation of the reactions to the event. It also provides some stress-related education to the personnel. Its aim is also to enhance the formal debriefing process.

*5. CISD*

As previously described, CISDs are structured group meetings that emphasise ventilation of emotions and other reactions to a critical event, as well as emphasise educational elements which may assist personnel in dealing with stress reactions.

*6. Significant Other Support*

Some incidents are so disruptive that the partners and family members of emergency personnel may need separate debriefings. A serious injury or line-of-duty death incident may be an example where support for 'loved-ones' is needed. CISM teams routinely provide a wide range of services for families. They include stress education, support during a highly stressful event, support for children after a tragedy, family consultations, CISD and follow-up services.

*7. Follow-up Services*

Follow-up services are an important component of CISD and usually begin twenty-four hours after an event. Telephone calls are made, and individuals and groups are checked on, visits to the work place may be arranged, and command officers are given general advice about how to best care for their distressed personnel.

Mitchell and Everly (1998) have further suggested that the key factors they believe to be the core 'mechanisms of action' upon which all CISM, as a crisis response intervention

system rests are: early intervention, provision of psychosocial support, opportunity for expression, crisis education and expectancy and coping.

### The Development of CISD Support Programs in Australia

Many programs of psychological support have been introduced in Australia to assist emergency services staff and their families. The growth in psychological support comes largely from the work of Jeffrey Mitchell and his CISD process. Mitchell's method has been widely adopted by Australian emergency services following his visits to Australia in 1986 and 1988. Similar developments have also occurred in Canada and Norway. The Mitchell model has been adopted by, and adapted to, many other occupational groups and work settings such as hospitals, defence force services, correctional institutions, banks, government education and welfare departments, industries and even recreational groups (Robinson, 1994).

The implementation of support programs was initially hindered by worker opinion. Opinions persisted that workers who react to traumatic events are psychologically weak and unsuitable for the job; that talking makes people 'soft', and that these new support programs are not needed (Lawler et al., 1990). These attitudes made it difficult for programs to be accepted and supported. The role of ongoing educational programs were important to raise staff awareness of critical incident stress and the need for support following some critical incidents, and to encourage emergency services personnel to develop a more tolerant attitude. Despite these challenges, the introduction of support services in Australian emergency services was very rapid. Within three years of Mitchell's first visit in 1986, nearly every emergency service in Australia had established at least a rudimentary debriefing/peer support program (Robinson, 1994).

### Conclusion

Psychological debriefing is a popular method of assistance following a traumatic event. It is designed to promote emotional processing of the event through a discussion of

people's reactions. The debriefing model most frequently used, as well as the subject of the most extensive criticism is the CISD process (Mitchell, 1993). While there is abundant anecdotal evidence revealing that psychological debriefings are found to be very beneficial (Everly, Flannery & Mitchell, 1998), there have been conflicting reports as to their effectiveness (Bisson, Jenkins, Bannister, & Alexander, 1997; Deahl, Gillham, Thomas, Searle, & Srinivasan, 1994; Hytten & Hasle, 1989; Stephens, 1997).

Despite the amount of support for the need of psychological debriefing, Dyregrov suggests that there has been little scientifically systematic research examining its ultimate value (Dyregrov, 1997). The question of whether or not CISD is an effective or necessary intervention following a traumatic event has been a subject for debate for many years (Bisson & Deahl, 1994; Ostrow, 1996; Raphael, Meldrum, & McFarlane, 1995; Robinson & Mitchell, 1995). Several studies documented a non-signficant effect any effect of such intervention, while other studies have documented either a strong positive or negative effect. Uncovering the key mechanisms of action within CISD is an area that continues to require further exploration and understanding (Dyregrov, 1998; Rose and Bisson, 1998) and this will be explored in Chapter 8.

# Chapter 8

# Defining Debriefing

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## Introduction

CISD has become an integral component of psychological strategies to assist in the reduction of stress reaction and the prevention of psychiatric morbidity among personnel involved or associated with trauma (Watts, 1994). Any consideration of the therapeutic agency in psychological debriefing needs to include an exploration of a variety of psychological concepts and theories that may have contributory elements. These might include but not be limited to:

(i) individual therapy factors,

(ii) group process factors,

(iii) group therapy factors,

(iv) coping literature,

(v) the function of group membership,

(vi) the military experience,

(vii) crisis intervention theory, and

(viii) specific previous debriefing research.

## (i) Individual Therapy Research

A therapeutic relationship with a mental health professional is often the cornerstone of effective treatment of those affected by trauma (van der Kolk et al., 1995b). It is a complex relationship, particularly since the interpersonal aspects of the trauma (e.g. mistrust, betrayal, dependency, love and hate) tend to be replayed within the therapeutic dyad.

The debate surrounding the issue of therapeutic effectiveness is central to psychology as a science and a profession (Shalev, 1994). In 1952, Eysenck published research examining psychoanalytic and eclectic therapeutic results from 1920 to 1951. He argued

that his results showed that whilst approximately two-thirds of 'neurotics' who entered therapy improved within two years, an equal proportion who did not enter therapy also improved.

Later studies of spontaneous remission rates continued to find a median rate of 30% (Bergin, 1971). In a detailed analysis reported by Bergin, there was wide variation from one study to another. This may be explained by a corresponding wide variation of therapeutic skills. In addition, figures obtained on client symptom deterioration showed that deterioration occurred in some patients undergoing therapy and that this was more frequent than in control groups. Apparently either some therapists possessed very poor skills, or conceivably therapy disturbed some balance organically achieved by an individual causing even greater disturbance.

Similarly, research into key therapist interpersonal skills by Truax and Mitchell (1971) concluded "the therapeutic endeavour is, on average, quite ineffective" (p.301). They demonstrated that while some therapists are helpful, others are harmful. They identified the key skills that were likely to improve therapeutic outcome, regardless of the school of therapy being used. They concluded that effective therapists should:

(i) have accurate empathy,

(ii) display non-possessive warmth, and

(iii) be genuine in the helping relationship.

In a series of studies, Truax and Mitchell (1971) validated these findings across many different conditions and client groups. They found that the patients who tended to deteriorate also tended to have therapists who were low in these key factors. They found this phenomenon occurred in both individual and group therapy. In examining these variables with specific therapists, Truax and Mitchell found that accurate empathy and genuineness on the part of the therapist did not change across clients, but that to some extent clients could affect the therapist's level of non-possessive warmth. Therefore, it

was suggested that both therapist skills and interpersonal interactions should be examined when attempting to evaluate therapeutic outcome.

**(ii) Group Process**

Beneficial outcomes from group intervention may be the result of traditional agents of group change, i.e. group cohesion, catharsis, imitative behaviour, the sharing of information and addressing existential issues such as death (Yalom, 1975). Everly, Flannery & Mitchell (1998) suggest that a consensus of researchers in the debriefing field propose three key factors, as agents of change in debriefing interventions:

(i) ventilation and abreaction,

(ii) social support, and

(iii) adaptive coping.

The sharing of the emotional impact of an event through ventilation or self-disclosure and the cathartic sharing of a trauma story is noted as an important and adaptive way of dealing with a traumatic incident (Everly & Mitchell, 1997; Littrell, 1998; Pennebaker, 1990, 1993; Raphael, 1986; Shalev, 1994).

Social support theory would advocate that group debriefing is a way of improving social interactions (Everly et al., 1998). A caring attachment to others is considered important for recovery. Social supports can provide information, companionship and emotional support. Group support both in the initial traumatic encounter and in the post-incident environment has also been considered important by most publications on psychological debriefing (Everly & Mitchell, 1997; Pennebaker, 1990, 1993; Raphael, 1986; Shalev, 1994). Therefore post-incident efforts are generally directed towards restoring social supports (Everly et al., 1998). Sociological research by Quarantelli (1985) reveals that a strong, cohesive survivor support network consistently militates against the development of long-term symptoms of PTSD. Most people need some form of social support to overcome the effects of trauma, but often reject natural social supports because of fear,

shame or distrust. One urgent task of trauma management is the re-creation of a sense of human interdependence and community. Often fellow survivors provide the most effective short-term bond because the shared history of trauma can form the nucleus for retrieving a sense of community (van der Kolk, 1987b).

Many authors (Everly & Mitchell, 1997; Pennebaker, 1990, 1993; Raphael, 1986; Shalev, 1994) also suggest that an important step is to learn more adaptive coping skills to address the aftermath of a traumatic incident, and to learn to deal more effectively with future incidents. Group process may be important in mediating this learning. Both cognitive and behavioural coping skills are developed in the context of a group session, with an emphasis placed on processing information, cognitive appraisal, reasonable expectations of future performance and skill acquisition (Everly et al., 1998).

**(iii) Group Psychotherapy**

Although it is important to make a distinction between group therapy and the process of debriefing people in groups, there are findings from group therapy research that bear upon an understanding of psychological debriefing.

Van der Kolk (1987b) suggested that emotional attachment is the primary protection against being traumatised. He suggests that people have always gathered in communities to help them deal with outside challenges. They seek close emotional relationships with others in order to anticipate, meet and integrate difficult experiences. Contemporary research (e.g. Holen, 1991, 1993) has shown that as long as the social support network remains intact, people are relatively well protected against even catastrophic stressors. People rely on their families, colleagues and friends to provide such a trauma 'membrane' (van der Kolk et al., 1995b). In recognition of this need for affiliation as a protection against trauma, it has been widely supposed that the central issue in acute crisis intervention is the provision and restoration of social support (Lystad, 1988; Raphael, 1986; Mitchell, 1983). However, research has not supported that assumption.

The efficacy of standardised debriefing interventions following trauma has, in general terms, not yet been fully documented.

The task of group therapy and community interventions is to help traumatised people regain a sense of safety and of mastery (van der Kolk et al., 1995). Regardless of the nature of the trauma or the structure of the group, the aim of group therapy is to help people actively attend to the requirements of the moment, without undue intrusions from past perceptions and experiences. Group therapy is widely regarded as the treatment of choice for people suffering post-traumatic stress.

There are different forms of trauma-related group psychotherapy. Each has a different degree of emphasis on stabilisation, memory retrieval, bonding, negotiation of interpersonal differences, and support (van der Kolk, 1992). However, to varying degrees, the purpose of all trauma-related groups is to:

(iv) stabilise psychological and physiological reactions to the trauma,

(v) explore and validate perceptions and emotions,

(vi) retrieve memories,

(vii) understand the effects of past experience on current affects and behaviours, and

(viii) learn new ways of coping with interpersonal stress.

Bednar and Lawlis (1971) undertook an empirical analysis of group therapy results, and asked the questions "Can group therapy help?" and "Can group therapy harm?" They found that some patients receiving therapy improved while others deteriorated. Patients who were not receiving therapy however, tended to remain unchanged. Their most thorough investigation involved a study of 16 different therapists over many group sessions. Results revealed a large variation in therapeutic effectiveness amongst the therapists. The results suggest that analysing effectiveness of group therapy is more

complicated than looking at one-to-one therapy. The group process and interpersonal relationships within the group must also be considered (Westerink, 1995).

Bednar and Lawlis (1971) found that positive outcomes were related to:

(i) expression of feeling,

(ii) meaningful participation,

(iii) empathy, warmth and genuineness emanating from both therapist and group, and

(iv) group cohesiveness.

Group cohesiveness probably stems in part from group compatibility and it's ability to meet the personal needs of members. This implies that there are at least three key factors in debriefing:

(i) the ability of the therapist to establish rapport within the group,

(ii) the ability of the therapist to establish understanding, support and trust within the group, and

(iii) the make-up of the group.

In CISD, groups are usually not screened for compatibility or capacity for mutual support. Group incompatibility may make it more difficult for the group leader to build understanding and support within the group. As group cohesion must be established rapidly in one session, it is clear that high leadership skills are essential (Westerink, 1995).

In 1975, Irving Yalom studied the curative factors that facilitate improvement in group psychotherapy. He used a 60-item card sort technique with subjects to identify the most helpful items. The 10 items assessed to most helpful were:

(i) discovering and accepting previously unknown or unacceptable parts of myself,

(ii) being able to say what was bothering me rather than holding it in,

(iii) other members honestly telling me what they think of me,

(iv) learning how to express my feelings,

(v) the group's teaching me about the type of impression I make on others,

(vi) expressing negative and/or positive feelings toward another member,

(vii) learning that I must take ultimate responsibility for the way I live my life no matter how much guidance and support I get from others,

(viii) learning how I come across to others,

(ix) seeing that others could reveal embarrassing things and take other risks and benefit from it helped me do the same, and

(x) feeling more trustful of groups and other people.

The therapeutic context may be important in debriefing and the immediate dealing with traumatic experience, but it has also been seen to be important in the longer-term recovery of trauma victims (van der Kolk, 1987b). Group members are able to recognise that they are similar in important ways and respond to each other as aspects of their own selves (Pines, 1983). To begin with, they use each other as mirrors to reflect traumatic memories and feelings, which allows a shared reliving of the trauma. After a successful alliance has been formed with the group, individual differences slowly emerge, allowing members to break through their psychological numbing (van der Kolk, 1987b). Pines (1983) describes the process of therapy as a process of communication. Participants learn to express themselves in a language that can be understood by fellow members. Gradually, individual problems become located in the group process, recognised by all members. Participants, after hearing other members express their emotions, become capable of using similar actions to deal with their own traumatic experiences (van der Kolk, 1987b).

**(iv) Coping Strategies**

In many ways, a process approach may be most useful in trauma research, as there are different phases to traumatic experience. For example, Burgess and Holmstrom (1976)

showed that women who had been raped used different coping strategies when they first felt threatened, during the actual attack, and then immediately afterward, when they needed to escape or inform others. Horowitz (1986) showed that coping after the event also changes over time. A traumatic event may initially lead to outcry, then denial, which in turn may be followed by intrusive memories, flashbacks, and obsessive review. Individuals may oscillate between denial and obsession until they begin the process of acceptance and the development of adequate coping skills (Aldwin, 1993).

Problem-focused coping is a critical factor in adapting to trauma. This has been studied extensively by Solomon and her colleagues (1988), who have shown that soldiers who use this strategy are less likely to suffer PTSD. Freedy, Shaw and Jarrell's (1992) study of survivors of Hurricane Hugo also found positive impacts of problem-focused coping. However, the source of the problem and its perceived controllability can be critical mediators of the efficacy of this strategy. In Baum, Gatchel and Schaeffer's (1983) study of Three Mile Island, problem-focused coping was associated with a higher degree of distress. This was in part because efforts to effect bureaucratic changes were invariably frustrating.

Controllability also mediates the efficacy of emotion-focused strategies such as withdrawal. While Freedy and colleagues (1992) found that disengagement was associated with greater psychological distress, Ursano and colleagues (1994) review of disaster, suggest that withdrawal under extreme, chronic distress, such as being a POW, may be adaptive. In his description of Norwegian concentration camp survivors, Eitinger (1980) found that the coping strategies of building up an inner world and idealising the world outside of the camps were nearly universal. Indeed, psychological numbing and disengagement (dissociation) may be the only way to maintain 'ego integrity' under great duress, and may actually assist problem-focused coping (Figley, 1983). However, after the traumatic event, higher levels of emotion-focused coping are often associated with poorer outcomes, such as PTSD. Wolfe and colleagues (1993, in Ursano et al.,

1994) found that current use of escapism and extreme avoidance among Vietnam veterans was a good predictor of psychological distress; even better than the degree of combat exposure. The suggestion from this literature supports the idea that withdrawal and avoidance may be an adaptive response in the short term, but persistent denial may lead to long-term psychological distress.

Disclosing to someone plays a central role in coping with trauma (Pennebaker 1985, 1990, 1993). Trauma researchers highlight the development of meaning and the transformation of a person's self concept to a much greater extent than is common in the larger history of work on coping (Lifton & Olson, 1976; Lifton, 1973, 1988).

**(v) Group Membership**

The trauma response has generally been investigated as a singular experience. However it is unrealistic to separate an individual's psychological state from the many social forces which shape it (van der Kolk, 1987b). Psychological trauma generally occurs in a social context, involving either loss of attachment figures or loss of a basic sense of security and continuity that results from the accumulation of secure experiences with others. Lindemann (1944, in van der Kolk, 1987b) describes trauma as a sudden and uncontrollable loss of affective ties. Krystal (1968a, 1968b) states an acute trauma response involves standing alone, being abandoned by all sources of feelings of security. Van der Kolk (1987) suggests that the essence of a trauma response is the severance of secure affiliative bonds.

Van der Kolk (1987) claims that PTSD symptoms are always accompanied by impoverished interpersonal relationships. Following trauma, a victim may become anxious and clinging or suffer interpersonal numbing consequent to the loss of basic trust. Nonetheless, in both cases, the capacity for others to provide security and emotional support is either under or over-valued. In her study of the Buffalo Creek Disaster, Erikson (1976) describes the trauma as damaging to social life, damaging to the

social bonds that link people, and impairing their sense of community. This in turn can lead to disorientation and a loss of connection. Feelings of shame of their own vulnerability or anger at the lack of outside help leads victims to lose faith in the possibility of meaningful relationships.

Research on concentration camp survivors reveals that group formation had a significant influence on the chance of survival. Cohesive pairing was a specific coping response during their incarceration (Klein 1974, in van der Kolk, 1987b). Inmates formed stable pairs, and if one partner died, a new companion was quickly found. Other survivors described forming stable, loyal groups of seven to eight people, based on common origins or interests, with selfless devotion to each other and apparent total disregard for all outsiders (Davidson, 1984). From Davidson's survivor studies it has become clear that interpersonal support can, through buffering and protecting the self in the face of catastrophic situations, mitigate the traumatic process.

**(vi) Military Service and Trauma**

Emotional closeness in response to an external stressor is normal (van der Kolk, 1987b). However, the quality of these relationships can vary considerably, depending on the person's developmental level and prior experiences. The army, particularly in combat, maximises the impact of peer group cohesion. Basic training exploits an adolescent's need to substitute peer group for family ties. In clinical studies of WWII combat soldiers, Lidz (1946) and Fairbairn (1952) compared those soldiers who developed PTSD with those who did not. They both concluded that personnel with persistent symptoms had disrupted early family relationships and were prone to develop intensely dependent relationships with a single person. They found that PTSD symptoms developed after the disruption of such a relationship. A more recent study on Israeli soldiers showed that a disruption to group cohesion directly relates to the development of PTSD (Moses, 1978). Fox (1974) found that amongst US marines in Vietnam, loss of group cohesion is a major contributor to the development of PTSD.

### (vii) Crisis Intervention Literature

Psychological debriefing was developed as part of a model of crisis intervention (Shalev, 1994). Three key principles of the crisis intervention approach are:

- immediacy (rapid intervention),
- proximity (close to or within the crisis venue), and
- expectancy (setting appropriate expectations for treatment and return to functioning, see Aguilera & Mesick, 1986; and Solomon & Benbenishty, 1986).

In a review of psychiatric therapies, Speigel and Classen (1995) analysed the processes that underlie crisis intervention. They came up with: (i) immediacy in the timing of an intervention, (ii) social support, listening, (iii) ventilation of emotion (catharsis), (iv) commonality with others, shared experience, (v) cognitive processing of the trauma, anticipatory guidance, and (vi) educating, normalising, teaching coping responses.

In a recent review of CISD and crisis intervention groups, Wollman (1993) identified the following helpful factors: group cohesion, universality, catharsis, imitative behaviour, instillation of hope, imparting of information (teaching), altruism, timeliness, and existential factors. With the exception of timeliness, these factors are very similar to those identified in the group psychotherapy research. It should be noted however, that although CISD relies upon group therapy theory, it is not purported as group therapy nor as a substitute for group therapy. Mitchell and Everly (1993) clearly define it as a crisis intervention and not a form of psychotherapy.

### (viii) Debriefing Research and Theory

Curtis (1995) proposes a number of specific therapeutic steps that need to happen during a debrief. He believes if more careful attention is paid to these steps there would be more therapeutic consistency in the outcome of the debriefing process. His therapeutic

suggestions include: (i) identification, (ii) labeling, (iii) articulation, (iv) expression, (v) externalisation, (vi) ventilation, (vii) validation, and (viii) acceptance.

Building on Curtis, Atle Dyregrov has also undertaken extensive research in the field of traumatic stress management. He has explored the process issues in psychological debriefings to identify the factors that influence the success of the CISD group process (Dyregrov, 1997). Dyregrov identifies psychological debriefing as being quite different to group psychotherapy, in that most of the work is done in a single session meeting. Therefore, the trust, authority and structure needed to conduct a group debrief and achieve results, has to be established in the beginning of the meeting.

Dyregrov (1997) identified a number of factors that he suggested determine the climate and process in a debriefing. He classified these under seven general headings:

(i) degree of exposure to traumatic incident (sensory, life threat, losses, and homo vs heterogeneity),

(ii) leadership (training, preparation, leader and co-leader interaction, communicative and educational ability, activity and directiveness, respect for group, and gender),

(iii) rules (structure and utilisation),

(iv) participants (personalities, training experience, prior traumas, and support systems),

(v) group (culture, gender, cohesion, history, conflict, nature, and work group),

(vi) organisation atmosphere (acceptance, role distribution, and CISD routines), and

(vii) CISD environment (timing of the CISD, physical surroundings, sitting positions, duration of the meeting and disturbances).

Dyregrov emphasised the synergistic relationship between factors, suggesting that an alteration in any single factor can exert undue influence on all the other factors. A shift in emphasis on any one factor can either enhance or inhibit positive CISD outcomes.

In an examination of the CISD group process, Everly (1995) identified ten commonly accepted mechanisms of action:

(iv) early intervention,

(v) affective ventilation (catharsis),

(vi) opportunity to put the crisis into words on a cognitive level,

(vii) behavioural structure,

(viii) psychological structure and progression,

(ix) Yalom's (1970) group processes,

(x) support from one's peers,

(xi) demonstration of caring,

(xii) installation of hope and a sense of control, and

(xiii) opportunity for follow-up assessment and treatment, if appropriate.

Mitchell and Everly (1993) have also defined the key factors they believe to be the core process 'mechanism of action' upon which all CISM, as a crisis response intervention system rests are: (i) early intervention, (ii) provision of psychosocial support, (iii) opportunity for expression crisis education, and (iv) expectancy and coping.

**Conclusion**

Despite the numerous and long lists of factors influencing the success of the debriefing process, it is difficult to discern which are the most critical. In fact it is still somewhat problematic to state confidently that debriefing is in fact an efficacious process at all. This situation is well described by Rose and Bisson (1998) who recently conducted a systematic review of studies dealing with psychological intervention following traumatic events. They found that a number of the studies were of questionable validity due to methodological discrepancies, variation in timeliness, and a lack of clarity and exactitude in the description of the exact procedures used. Furthermore, Rose and Bisson conclude that such studies provided little evidence for psychological debriefing acting as a

preventative of psychopathology following a traumatic event. They also cautioned care to those currently applying psychological debriefing in practice because of the lack of scientific evidence of its utility. Most importantly, Rose and Bisson identified the need for conducting ongoing and thorough research into the effectiveness psychological debriefing.

# Chapter 9

## Debriefing Effectiveness

# Chapter 9

# Debriefing Effectiveness

## Introduction

During the last few years, several critical reports have been published regarding the use of psychological debriefing (see Dyregrov, 1998). In particular, the Mitchell model of CISD has come under scrutiny. The heated debate going on in Australia, the United States and the United Kingdom has led some agencies to suggest a discontinuation of the use of the CISD protocol (Avery & Orner, 1998). The debriefing debate grew rapidly after Beverly Raphael, Lenore Meldrum and Sandy McFarlane wrote a letter to the editor of the British Medical Journal in 1995, suggesting the need for more randomised, controlled studies of the debriefing method (Raphael et al., 1995). They stated that several studies of debriefing reported a negative effect and further suggested that psychological debriefing could actually aggravate the traumatic process.

## Previous CISD Research

Hytten and Hassle (1989) conducted a study of firefighters following a hotel fire. Of the 115 professional and volunteer firefighters involved, 47% described the experience as the worst experience they had ever had and 10% were identified as having clinically significant stress reactions. Nevertheless, 80% thought that they had coped with the job 'well' to 'fairly well' and for as many as 66%, the rescue action represented something positive to them. Thirty-nine firefighters underwent formal debriefing. All of the 115 surveyed reported that they had talked extensively about their experience with others, either at a formal debriefing session or with a group of fellow workers. Of those who participated in debriefing, the vast majority (i.e. 38 out of 39) found the experience helpful. They said the debriefing was useful professionally and reported that it increased their self-confidence. The results however, showed no significant difference on the Impact of Event Scale (IES) 7 to 21 days post-incident, between the group who were debriefed and those who had simply talked to their colleagues.

In a study of firefighters following a major bushfire, McFarlane (1988) suggested that debriefing may have had a negative effect on some participants. He also found that the best predictor of subsequent stress problems was a history of past treatment for psychological disorders. The group that was arguably the most affected by the disaster included people who had experienced more adverse life events before the fire and had higher premorbid scores for neuroticism than any other group in the study.

Deahl, Gillham, Thomas, Searle and Srinivasan (1994) studied 62 soldiers involved in the recovery and identification of bodies during the Gulf War. They found that there was no significant difference in terms of psychiatric morbidity between those who had received a psychological debriefing and those who had not. They also found that at nine months following the war, morbidity was more likely in those with a history of psychological problems and those who believed their lives had been in danger.

Alexander and Wells (1991) were able to examine the psychological state of police officers involved in the recovery and identification of bodies following an oil rig disaster. Fortunately, they were also able to compare this with their condition prior to the incident. Psychological debriefings were offered following the operation but none of the officers accepted the offer. Despite being left to their own coping strategies the results showed that the experience had caused an overall improvement in mental health. This finding highlights the often-overlooked potential for positive reactions to trauma. The list of possible positive reactions includes: the chance to develop personal coping strategies, to discover inner strength, to develop a sense of mastery over a range of events, to realise the value of life, to resolve to strengthen family ties, and to come to appreciate one's own relatively secure and happy existence (Shalev, 1994).

The results of studies by McFarlane (1988) and Deahl and colleagues (1994) reinforce the view that the nature of a response to trauma is dependent on individual susceptibility

at the time of the incident. Appropriate intervention is determined by the state of mind of the individuals concerned and not necessarily by the time passed since the incident (Hamling, 1996). As an aside, Hamling proposes that this is particularly important when the incident does not have a clearly identifiable conclusion or when there is personal involvement in the incident and grief counselling may be the most appropriate form of assistance.

The spring 1996 issue of the Newsletter of the European Society for Traumatic Stress Studies (ESTSS) featured an article describing the process by which the Lincolnshire Joint Emergency Services was established in the early part of the 1990's. Although principally an educational strategy for all emergency services in the United Kingdom, the initiative also developed a psychological debriefing resource consisting of about 30 individuals who have participated in an introductory workshop on the Mitchell Model of Critical Incident Stress Debriefing. Forty debriefings were held and a systematic evaluation of the impact of these was carried out by Matthew Hutt as part of a doctoral thesis at Sheffield University (ESTSS, 1996).

Hutt's research (ESTSS, 1996) confirmed a high degree of 'consumer satisfaction' with debriefing meetings. However, the evidence for a distinct therapeutic effect of this intervention was far from decisive. Rather, the limitations of this CISM service became more and more apparent when the data was examined. For instance, Hutt and colleagues reported data suggesting that the rated helpfulness of psychological debriefing was inversely proportional to the reported impact of a critical incident on the emergency responders (see Orner, Avery & Boddy, 1997; Avery & Orner, 1998). Therefore, the less affected a responder was, the more likely they were to consider an intervention helpful. This was not a resounding endorsement from those who might be in greatest need of staff support and follow-up services. In the light of this evidence, the Lincolnshire Joint Emergency Services Initiative decided to review and reconsider the advisability of continuing to carry out psychological debriefings using the format

proposed by Mitchell (1983). In the main, they recognised the need to reformulate the aims of psychological debriefing (Avery & Orner, 1998).

It must be clearly stated that what is being measured in these studies, i.e. 'debriefing', may vary considerably from one study to another, and may be quite different from the CISD model initially designed by Jeffrey Mitchell in 1983. These and other differences between studies of debriefing are often not recognised by the authors. Anything that is termed 'debriefing' is generally assumed to be CISD. Therefore it needs to be clearly stated that these studies are rarely measuring the same thing. For instance, Kenardy, Webster, Lewin, and Carr (1995) in their study of the Newcastle earthquake, began their assessment two and a half years after the event. They also stated that there were no controls over the 'debriefing processes' nor clarity as whether or not debriefings were provided to the groups they were investigating.

**Evaluation Measures**

Many research studies have utilised self-evaluation reports. Robinson & Mitchell (1993) found that 96% of emergency service and 77% of hospital/welfare staff reported a marked reduction in stress symptoms which they believed was at least in part due to the debriefing. Participants reported that they valued talking about the incident, especially with those who had experienced the same situation. Taylor (1993) in a study of police officers, found that on average, they rated their debrief as being moderately valuable for themselves and for others in the group. Many reported that talking about the event was the greatest benefit. There were others who reported that the information provided by the debriefers during the teaching phase was most helpful. However, there were also few officers who reported an increase in symptoms. Taylor suggested that this could be because of delayed reactions or it could be that the debriefing made their symptoms worse.

In terms of psychiatric morbidity, there is also some debate as to the effectiveness of CISD. Many research projects use such measures as the General Health Questionnaire (GHQ) and the Impact of Event Scale (IES) and the results are not as positive as self-report inventories. In the Gulf War, no positive long term advantage was found when comparing those body handlers who had been debriefed with those who had not (Deahl et al., 1994). In spite of this finding, these authors surprisingly reiterated their commitment to debriefing. A report on the effects of stress debriefing on the rate of recovery of 195 EMS personnel and disaster workers following an earthquake in Newcastle, revealed no improved rate of recovery among those helpers who were debriefed, even when the level of exposure and helping-related stress were taken into account (Kenardy, Webster, Lewin, & Carr, 1995). Raphael, Meldrum & McFarlane, (1995) go further and argue that debriefing may increase problems through being inappropriate for some people in its format or timing, and may even lead to secondary traumatisation amongst participants. They raise issues about the complexity of the trauma experience for individuals and strongly argue for the further evaluation of debriefing and individualised counselling following trauma.

**Process Variables**

There has been a great deal of emphasis placed on evaluating the effectiveness of the Mitchell model by assessing outcome measures, but little attention has been paid to aspects of the process itself, particularly the therapist/leader skills and group process factors (Westerink, 1995). The Mitchell model of CISD has been taught to and practised by many clinicians and emergency service peers. Not all of these people however, will have good counselling skills and some may lack the depth of psychological knowledge to appreciate the full implications of what they may meet in a CISD. Recognition of early signs of a reaction that may lead to long term negative outcome is important, so that additional help may be provided promptly (Westerink, 1995).

Due to the apparent simplicity of the CISD process (i.e. having seven set stages), many counsellors/mental health professionals have learned these stages and set out to practise CISD failing to recognise the importance of group process (Westerink, 1995). Although it may be argued that CISD is one of the most difficult forms of intervention, inexperienced counsellors may attempt to facilitate a group without ever having learned the counselling/group therapy skills necessary to work with groups. In an actual scenario, a group leader will have just one short session in which to establish rapport, credibility and promote co-operation. These must be built up quickly even when working with a disparate group, as group members will soon be asked to talk about their most difficult concerns and deepest feelings. To make it even more difficult, group cohesion needs to be achieved at a time when some group members may have problems with concentration and emotional control due to strong reactions following a traumatic incident (Westerink, 1995).

Debate has specifically arisen as to whether CISD is therapy or should be viewed as a learning situation, with people sharing information about the disaster and finding strategies for recovery (Westerink, 1995). Regardless of which view is taken, Westerink also suggests that great skill is needed to lead the group effectively. The leader or facilitator must have the clinical skills to guide the group through the stages at an appropriate pace. She or he must be able to:

(i) gauge the mood of the group,

(ii) know when to move from one stage to the next (or return to earlier stages),

(iii) understand grief and loss issues as well as stress,

(iv) assess the needs of those who are silent, and

(v) identify those for whom further help or referral is appropriate.

Simply applying the model without having the skills of an effective therapist would obviously fail to ensure success and would probably lead to disaster (Westerink, 1995).

The key elements of CISD are a traumatic event, a skilled debriefer, a group, a set process (the debrief), and a recovery environment. Each of these elements is a valid aspect for research. Attempts to evaluate CISD, however, have invariably concentrated only on outcome measures. In addition, Westerink suggests that most research has:

(i) ignored the fact that CISD should be just one element of a total stress management package (see Mitchell & Everly, 1997),

(ii) found there are problems in many contexts in establishing a control group,

(iii) assumed the model to have been adequately applied in all situations,

(iv) not evaluated the quality of the intervention by considering such things as therapist skills or the timing of the CISD,

(v) selected varying criteria for examination thus making comparison difficult, and

(vi) failed to assess the nature or conditions of the recovery period or social environment.

Obviously, there are problems with previous CISD research within many of these contexts.

**Debriefing Efficacy**

Only a limited number of people who experience trauma develop PTSD. Van der Kolk and colleagues (1995b) suggest that most people seem to be able to successfully negotiate the initial adaptive phases without succumbing to the long-term progression of their acute stress reaction into PTSD. For them, the trauma becomes merely a terrible experience that happened in their past. Van der Kolk and colleagues propose that it is unclear whether talking about what has happened is always useful in preventing the development of PTSD. Van der Kolk cites recent CISD research findings where a few controlled studies that have examined the preventative effect of debriefing immediately following exposure to a traumatic event have suggested a poorer outcome following debriefing as compared with no intervention (see McFarlane, 1984). Given the lack of controlled studies, van der Kolk suggests that clinicians are left with the impression that

the initial response to trauma consists of reconnecting with supportive networks and engaging in activities that re-establish a sense of mastery. He further suggests that it is obvious that the role of mental health professionals in these initial recuperative efforts is quite limited.

**Conclusion**

The scientific debate about the efficacy of debriefing has been prominent for the last decade (Dyregrov, 1998; Gist, Lohr, Kenardy, Bergmann, Holdrum, Rudburn, Patton, Bisson, Woodall, & Rosen, 1997; Gist & Woodall, 1998) and as yet shows no sign of resolution. Robinson and Mitchell (1995) on the one hand and Kenardy and Carr (1996) on the other, have raised many interesting points, but both sides in the debate acknowledge the value of independent evaluation of CISD or any of the interventions outlined in Mitchell's CISM package. The major problems facing any such evaluation of psychological debriefing seem to be ones of design: the control of variables appears to be the greatest obstacle to gathering verifiable data.

So far little clear documentation of the preventive effect of debriefing on post-traumatic stress has been produced. It must be presumed that debriefing on its own, without being followed up with support and care from leaders and colleagues has more limited value. One of the positive outcomes of the debate regarding debriefing is the highlighting of several factors of which we have insufficient knowledge. Future studies will presumably explore these factors and correspondingly improve the quality control of debriefing.

# Chapter 10

# A Methodological Assessment of CISD Research

# Chapter 10

## A Methodological Assessment of CISD Research

### Introduction

Raphael, Meldrum and McFarlane are respected experts in the traumatology field, and their reservations against debriefing have left many professionals in doubt about the necessity and the effectiveness of debriefings (Dyregrov, 1998). However, Dyregrov proposes that their critique was based on studies that did not warrant the negative presentation they gave of debriefing. Dyregrov (1998) undertook an evaluation of studies of debriefing and in particular CISD. What follows is Dyregrov's (1998) assessment of findings from previous CISD studies that purport to have found no effects, positive effects and negative effects.

### Studies with Negative or Neutral Findings

Deahl and colleagues (1994) investigated the proneness for psychological disturbance in soldiers from the Gulf War, finding that debriefing did not reduce later psychiatric morbidity. Dyregrov (1998) proposed that they did not make clear what the debriefing consisted of, since the intervention is only sketchily described in the article. In addition, the timing of the debriefing was highly variable. The most serious methodological objection he presents, however, was the self-selection that had taken place to the debriefing group. This means that the participants in the debrief group personally wanted to take part in the debrief, most likely as a result of a greater need to talk about the event than the individuals who automatically became part of a control group. This demand characteristic becomes a serious source of error that may explain the possible differences between the groups. The authors themselves are aware of these methodological limitations and conclude that despite their negative results, they remain committed to the principle of debriefing (Deahl et al., 1994).

In Australia, Justin Kenardy and colleagues (1996) conducted research on rescue personnel after an earthquake in Newcastle. They found no discernible effects of the debriefing during the two years following the disaster (as measured by GHQ-12 and IES on four different occasions). However, the groups were established through self-selection, which again may be a source of contention for any published results (Dyregrov, 1998). The participants taking part in the debriefing group were significantly different from the control group in terms of their level of education; their professional prestige; and their gender (a majority of females, who usually report more distress on most measures, see Breslau, Davis, Andreski, Peterson, & Schultz, 1997). The authors had no control over the debriefing and thus it is not known what the procedures consisted of. Furthermore, neither the background and training of the debriefing leaders nor the timing of the debriefing is documented. Nonetheless, the authors report that 80% of the participants felt that the debriefing was of help (Kenardy et al., 1996).

Hobbs, Mayou, Harrison and Worlock (1996) randomly assigned a group of victims after a traffic accident to an intervention group and a control group. The intervention consisted of what the authors called psychological debriefing, which lasted for one hour, and was usually carried out between 24 and 48 hours following the accident. While the groups were not different regarding symptoms preceding the intervention, the intervention group had experienced more serious physical injuries following the accident and they stayed longer in hospital than the controls. Four months following the intervention, the researchers found no significant decline in symptoms (as measured by the IES) in either of the two groups. In two sub-scales of the "Brief Symptom Inventory" the intervention group had higher scores (i.e. more problems).

It needs to be clearly noted that this 'debriefing' intervention was carried out individually and not in a group, and the sessions lasted for one hour only, without any follow-up. Dyregrov (1998) proposes that this was more a study of crisis intervention of dubious quality than a study of debriefing. Clinically, it is also questionable whether the use of an

intervention following the debriefing model was appropriate at that point in time following the event. Dyregrov (1998) states that his clinical experience has been that the physical healing must take place before the psychological healing processes can continue. It seems quite clear that this study (and others like it) look at the effect of a single individual consultation, more than study the effect of debriefing.

Bisson, Jenkins, Alexander and Bannister (1997) randomised patients wounded in a fire to what they called a debrief group and a control group. The intervention was given to each single patient or couple, lasting on average 44 minutes. It was carried out by a nurse or a research psychiatrist who was tutored by the first author (a psychiatrist). The results showed that sixteen (26 %) of the debriefing group was found to have PTSD after thirteen months, while in the control group, only 9 % were diagnosed with PTSD. Even before the intervention, the debriefing group was described as having experienced twice as many important past traumas, and in addition the debriefing group had experienced more serious fire traumas than the control group. Dryregrov (1998) suggests that both these aspects can explain why the debriefing group's PTSD diagnoses were higher in number than for the control group.

Turnbull, Busuttil and Pittman (1997) and Reiss and Leese (1997) have raised several other methodological objections against this study. Bisson and colleagues also reported that the earlier the intervention was carried out following the accident, the worse the individuals were doing later on. This pertains to Dyregrov's (1998) criticism of the Hobbs et al., 1996 study. Dyregrov reinforces that is clinically unsound to intervene following debriefing principles while physical healing is taking place. A question could also be raised regarding the type of quick intervention that took place in the study by Bisson et al., (1997). Dyregrov claims that it is important when practicing debriefing to spend the amount of time required. In this study, an average of 44 minutes was spent with the patients. If anything is measured in Bisson et al's study, Dyregrov suggests

that it must be the effect of a badly timed, inadequately timed, unsound clinical intervention.

In addition to these studies, Hytten and Hassle (1989) did not find any differences in IES scores between fire-personnel who, subsequent to a hotel fire, participated in debriefing and those who did not, even though the participants in the debriefing viewed it favourably. Again self-selection determined the group composition, a methodological flaw also present in another debriefing study by Matthews (1998). Dyregrov states its obvious limitations, and reinforces the complexity of conducting research in this area.

Self-selection is a particular problem in these studies (Dyregrov, 1998). People who do not feel the need for debriefing because they were either peripheral to the event or felt that the event was of little consequence to them will be part of the control group. Secondly, people who use avoidance and denial as a coping strategy will tend to stay away from such meetings. If this 'control' group is compared with a group, that through debriefing meetings, are encouraged to put their thoughts and reactions into words, then one would expect the debriefed group to score higher on self-reported reactions.

In conclusion, Dyregrov (1998) suggests that those studies which report no effect of the debriefing (or a negative effect, see Bisson et al., 1997) have several methodological weaknesses, that include:

(i) they analyse interventions that only to a limited degree can be called psychological debriefing,

(ii) several studies use self-selection to intervention group and control group,

(iii) it is not clearly defined what the debrief consisted of,

(iv) the timing of the intervention is variable and partly outside the time period recommended for debriefing,

(v) the intervention used seems to be clinically insufficient regarding the traumatic event experienced,

(vi) the background and training of the persons who have carried out the interventions is unclear or possibly inadequate,

(vii) the groups in the studies are not comparable, and

(viii) debriefing is investigated in isolation, and not as part of an integrated chain of assistance as recommended in Jeffrey Mitchell's CISM model (Mitchell & Everly, 1997).

**Studies with Positive Findings**

A number of studies have concluded that debriefing or CISD is followed by a positive effect for the participants (Bohl, 1991; Ford et al., 1993; Jenkins, 1996; Robinson & Mitchell, 1993; Stallard & Law, 1993; Yule & Udwin, 1991). Everly, Flannery & Mitchell (1998) have reviewed a number of published and unpublished reports and case studies showing positive effects of debriefing. In almost all of the reports (also the negative studies previously described) the participants of the debriefing groups (or individual meetings) when asked to rate their satisfaction or the helpfulness of the debriefs, experienced the meetings as being helpful.

Everly, Boyle and Lating (1998) conducted a meta-analysis based on debriefing studies found in medical and psychological databases. They identified 14 empirical investigations of which 10 were utilised for the analysis. Three were excluded because they failed to use group debriefing interventions and one because it failed to yield data that meaningfully could be used in the analysis. They found a significantly positive effect size (mean Cohen's $d = .54$, $p < .01$) resulting from the CISD intervention. The authors comment that this beneficial effect was revealed despite the wide variety of subject groups, the wide range of traumatic events, and the diversity of outcome measures.

However, many of the methodological objections raised in relation to the critical studies are also evident in studies where participants report positive results. Dyregrov (1998)

suggests that a number of very different interventions are being called debriefing, and the extent and the timing of these interventions vary. Because the training and background of the debriefers may also vary considerably, there can be a general lack of control over subject/control group assignation as well as inconsistencies in the procedure.

Chemtob, Tomas, Law and Cremniter (1997) carried out a thorough study regarding "the influence of debriefing on psychological distress". In the study they describe how civilian victims of a hurricane had their problems reduced compared to a group who only later received the same type of intervention and who then, after debriefing, reported the same reduction in problems. The effectiveness of the intervention was evaluated by the use of the Impact of Event scale used before and following the intervention. Dyregrov (1998) suggests several objections to this type of design. In addition to lack of data regarding the participants ahead of the debriefing, the participating group was very heterogeneous. Furthermore, the intervention, consisting of debriefing plus a two hour long lecture on "post disaster recovery", was carried out six to nine months following the disaster. Nonetheless, this study confirms that debriefing can be effective a long time after the time period recommended for debriefing, a finding similar to that reported by Stallard and Law (1993) in their study of adolescents who survived a mini-bus traffic accident.

**Conclusion**

Several studies have been published over the last few years concluding that debriefing following critical events can have a positive effect, can have a negative effect or can have no effect on mental health measures following critical events. Dyregrov (1998) has revealed that many of these studies are subject to flaws. Principal amongst these are the use of poor methodologies; the use of inexperienced debriefers; the variability in subject background; and the lack of control over group placement. Dyregrov (1998) suggests that it is inappropriate to draw firm conclusions from studies whose validity are problematic. He suggests that rather than dismiss debriefing because of such findings,

more controlled studies need to be undertaken and verified. Because participants themselves feel there is benefit in debriefing, it seems appropriate to pursue a line of enquiry that seeks to validate those aspects of it that make it a worthwhile part of critical incident management. Following Dyregrov, there are a number of broad areas of concern, each of which has a number of variables that need to be critically examined. These include matters concerning:

(i) methodology, i.e. what process is used and how strictly it is adhered to,

(ii) skills and training of the debriefing team,

(iii) the use of standardised measures of psychopathology,

(iv) each participants' background, and

(v) group selection and dynamics

Within these broad fields, the current study investigates a number of variables. On the basis of PTSD being consequent to the initial impact as well as the subsequent debriefing intervention, dissociation as a coping mechanism and disclosure as a therapeutic mechanism will be examined in some depth. It must be borne in mind that none of these variables are able to operate without influencing and being influenced by others. Therefore this study, like any other, must also make reference to other variables of both the impact and the recovery.

# *SECTION 3*

## *THE PORT ARTHUR STUDY*

*"Men believe themselves to be free, simply because they are conscious of their actions, and unconscious of the causes whereby those actions are determined" Spinoza*

# Chapter 11

# Method

# Chapter 11

# Method

The 'Port Arthur Incident' occurred when a single gunman killed 35 people (33 adults and 2 children) and injured 21 others on the Tasman Peninsula in the southeast of Tasmania, Australia, on the 28th April, 1996. The incident occurred approximately 100 kilometres (62 miles) south-east of Hobart, Tasmania's capital city, with the majority of the deaths and injuries occurring within the Port Arthur Historic Site. The Site (formerly a penal settlement) is of great cultural and economic significance and is one of the major tourist draw cards for Tasmania. Hundreds of members of the public were in the area at the time. The present study was an opportunistic one, aiming to explore the reactions of emergency services (EMS) personnel involved in the response to the Port Arthur incident, and to assess the effectiveness of the Critical Incident Stress Management (CISM) recovery process (that commenced on the day of the incident and continued for thirteen days following), in alleviating the development of post trauma symptomatology.

## Method

### *Aim*

Within the process of impact and recovery from a traumatic incident, the present study explored two key avenues of trauma research: identifying the risk factors for developing psychopathology following a traumatic event, and identifying the therapeutic factors occurring during recovery.

More specifically, the research aimed to:

(vi) to identify stress reactions experienced by the participants prior to, during and following the incident,

(vii) to identify adaptive and maladaptive coping methods/resources utilised by participants during and after the incident (those cognitive processes and behavioural characteristics that assisted individuals in coping with such an

event, as well as identifying those that were likely to lead to the development of traumatic stress), and

(viii) to explore the process of CISD within a CISM recovery program, in order to identify those elements that appear to be most beneficial.

### *Design*

The research was conducted over two stages with emergency service personnel participating in face-to-face, semi-structured interviews at each stage. The interview at Phase 1, occurred 8 months following the Port Arthur incident, and took between 90 and 120 minutes. The interview at Phase 2, occurred 20 months following the Port Arthur incident, and took between 30 and 60 minutes.

### *Materials*

An interview schedule was developed which allowed exploration of ideas and gave the interviewer the freedom to follow-up on any issues of special importance for a particular participant (see Appendix A). Many of the questions required open response answers, so that participants could choose their own descriptive terms (as suggested by Silverman, 1985). Included in the interviews were a number of recognised diagnostic measures to assess the presence of traumatic stress symptoms (see below for further details). At Phase 1 interviews were planned to take approximately an hour and a half to be administered, and at Phase 2 approximately 45 minutes.

The initial semi-structured interviews were designed to encourage participants to speak freely on topics of their choice, while certain questions provided a framework for exploring common themes. In particular, questions explored each individual's attitudes and feelings in relation to:

(i) the extent and type of their involvement in the incident,

(ii) their understanding of the incident,

(iii) their assessment of the debriefing process,

(iv) their reactions during and after the incident,

(v) their coping strategies during and after the incident,

(vi) support they received in relation to the incident, and

(vii) the impact of the incident on their work, social and family functioning.

A number of standardised assessment measures were given to participants at the end of each interview. This was in the form of a booklet, to be completed and returned to the research team in a stamped/addressed envelope provided. They were returned within a mean period of six weeks.

The measures in this booklet included:

(a) *Impact of Event Scale -Revised (IES-R)* (Weiss & Marmar, 1997)

The IES-R is a development and extension of the 15-item IES (that indexed intrusive and avoidance aspects of post-traumatic stress, and was shown to correlate highly with post-traumatic stress responses (Zilberg et al., 1982). It contains the Intrusion and Avoidance subscales from the original IES as well as a new scale for Hyperarousal.

(b) *Symptom Check List (SCL-90-R)* (Derogatis, 1977)

The Symptom Checklist 90R is a 90-item self-report symptom inventory that measures a range of psychophysiological and psychological reactions which, depending on intensity, might be regarded as symptomatic of a particular condition such as somatic, anxiety or phobic disorder. The Global Severity Index (GSI), a summary index of the mean distress level, represents a useful single indicator of current distress. The SCL-90R also contains nine specific symptom indices (for Somatisation, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism). It has been widely used in previous studies of post-trauma reactions (see Creamer et al., 1993).

(c) *General Health Questionnaire (GHQ-28)* (Goldberg, 1978, 1988)

The GHQ is a widely used instrument for indexing psychological disturbance, and it allows comparison with other research into post-traumatic stress. It has been standardised for use with the general population and is widely used as a screening instrument giving a probability estimate that an individual is a psychiatric 'case'.

(d) *Trauma Symptom Inventory (TSI)* (Briere, 1992)

The TSI is a 100-item test of post-traumatic stress and other psychological sequelae of traumatic events. The various scales of the TSI assess a wide range of psychological impacts. The TSI contains 10 clinical scales: Anxious Arousal, Depression, Anger/Irritability, Intrusive Experiences, Defensive Avoidance, Dissociation, Sexual Concerns, Dysfunctional Sexual Behaviour, Impaired Self-Reference and Tension Reduction Behaviour.

*Interview Format: Phase 1*

There were five sections to the interview protocol for Phase 1, composed as follows:

1. *Demographics*;
    - personal details,
    - previous critical incidents,
    - work stressors,
    - personal stressors.

2. *Port Arthur Incident*;
    - experience in relation to the incident,
    - self-ratings of impact
    - understanding/cognitions of the event,
    - work attitude/ performance,
    - dissociative experiences.

3. *Response to the Incident*;

- signs and symptoms of critical incident stress,
- impact on other areas of functioning (social/family/work),
- post-trauma symptomatology.

4. *Coping and Resources*;

- personal coping strategies and resources,
- level of external support (friends/family/work).

5. *Critical Incident Stress Management*;

- involvement in defusing and/or debriefing (note: debriefing includes one on one and follow-up counselling), as part of a CISM recovery environment,
- rated how valuable each was for them and their colleagues,
- rated defuse and debrief on a number of variables relating to:
  a. group process, and
  b. skill of group leader.

Visual analog rating scales were utilised for many of questions in the interview where a quantitative assessment was required.

*Interview Format: Phase 2*

There were five sections to the interview protocol for Phase 2, composed as follows:

1. *Change in demographics*;

- personal details,
- other critical incidents,

2. *Port Arthur Incident*;

- self-ratings of impact,

3. *Response to the Incident*;

- impact on other areas of functioning (social/family/work),
- post trauma symptomatology (PTSD),

4. *Critical Incident Stress Management*;

- involvement in defusing and/or debriefing (note: debriefing includes one on one and follow-up counselling), as part of a CISM recovery environment,
- rated how valuable each was for them and their colleagues.

***Participants***

Ninety-six permanently employed Tasmanian Emergency Services personnel who were actively involved in the response to the Port Arthur incident participated in this research study. The 96 personnel consisted of 8 Tasmanian Ambulance Service officers, 1 Tasmania Fire Service investigator, and 87 Tasmania Police officers.

***Procedure***

Organisational approval for the research was obtained from the Tasmanian Ambulance Service, the Tasmania Fire Service and the Tasmania Police, conditional upon no volunteers being involved in the research. One hundred personnel were approached to participate in the research. Four personnel from the Tasmania Police declined to participate.

The selection process progressed through the following stages:

(i) definition of work groups and roles in respect to EMS response to the Port Arthur incident,

(ii) prioritising these groups in terms of their intensity of involvement,

(iii) gathering names of officers involved in each work group, and

(iv) proposed participants individually contacted by the research team to brief them on the research and arrange and interview time and location (N.B. participants were located in all areas of Tasmania).

Approval was received from the University of Tasmania Ethics Committee and full support was gained from the Tasmanian Emergency Services Critical Incident Stress Debriefing Team, and the related organisations, associations and unions. Ethical issues in relation to informed consent, confidentiality and counselling support were clearly defined and adhered to. The study was approved by the Management Committee of the Tasmanian Emergency Services Critical Incident Stress Debriefing Team, and access to participants was initially gained through this organisation.

Initial contacts were be made by phone or personal communication from the Police Psychologist or the CISD Team Co-ordinator. The semi-structured interviews were conducted by the author (psychologist) and a research assistant (social worker), who undertook approximately twelve hours of training in the standardised administration of the clinical interview. The administration of the interviews was initially assessed and reviewed for consistency by Police Department staff over an initial four-week period. Subsequent data analysis revealed no significant differences between the interviewers on participants' key self-ratings of distress.

Interviews were conducted either at the participant's place of work or at the Staff Support Unit of the Tasmanian Police Service. Participants were individually interviewed at Phase 1 and Phase 2, in an office that served as part of the Police Department's Staff Support Unit. They were told at the commencement of interviews, that the results of the research would remain confidential.

### *An Overview of the Incident and Recovery Operations*

The majority of the deaths and injuries at the Port Arthur incident occurred within the Port Arthur Historic Site. At approximately 1.00 p.m. on Sunday 28 April 1996, a man entered the Port Arthur Historic Site. He drove to the main car park and parked his vehicle. He then entered the Broad Arrow Cafe, carrying with him a bag which contained a high powered firearm, and joined the queue waiting to purchase food. After being served he went outside, sat at a table and ate (Richman, 1997).

At about 1.30 p.m., the perpetrator re-entered the Broad Arrow Cafe and commenced shooting. After leaving the cafe he continued shooting at various locations within the Historic Site and then left and traveled towards Hobart continuing shooting as he went. For many it was not just the trail of death, injury and mayhem that he left behind him that was distressing, it was more the callousness of his actions, which was evidenced by his stalking and execution of several of the victims, including children. He was eventually contained at the Seascape Cottage where he was believed to have three hostages and was shooting at police. Police officers were pinned down by gunfire and were being fired upon intermittently. Apart from Seascape Cottage, the other crime scenes were guarded by police to preserve the evidence until a complete crime scene examination could be undertaken the following day. Due to evidentiary imperatives, the deceased could not be cleared from the scenes immediately (Richman, 1997).

The incident concluded at 7.45 a.m. on Monday 29 April 1996 with the perpetrator's apprehension by the Police Special Operations Group. The three hostages were deceased and the Seascape Cottage had been set alight by the perpetrator and destroyed by the fire. It is believed that the hostages were deceased prior to the perpetrator being contained by Police and indeed that the owners of the Cottage might have been the first victims, prior to the perpetrator entering the historic site. The perpetrator himself was injured by the fire (Richman, 1997)

All deceased were removed from the respective scenes by late afternoon on the Monday. The number of emergency service personnel present at the scene(s) was scaled back significantly on the Tuesday. Many other personnel remained heavily involved in mortuary duties, forensic examination and other investigatory roles for a considerable period of time. At the conclusion of the investigation, 865 witnesses had made statements in relation to the incident, with a total of approximately 1050 statements being obtained (Richman, 1997). Due to the nature of the incident, the number of crime scenes, and the fact that it continued until the next morning as a siege situation, the number of emergency service personnel involved was high. From the available information a total of 685 emergency service personnel were involved in the response (see Table 12.1 for a breakdown of the support services involved).

**Table 12.1** Operational breakup of emergency services personnel involved in the study

| | *Permanent* | *Volunteer* |
|---|---|---|
| *Ambulance* | 31 | 31 |
| *Fire Service* | 6 | 43 |
| *Police* | 457 | 69 |
| *SES* | 0 | 16 |

(Note: Personnel classified as permanent for Tasmania Police are sworn officers. Those classified as volunteers are unsworn officers, Richman 1997)

In all, 65 people (not including the members of the Management Committee of the EMS CISM team) were utilised in the CISM response for EMS personnel involved in the response to the incident. The break-up was 22 mental health professionals, 37 EMS personnel, and 6 administrative assistants. Fifty-one defuses and 113 debriefs were conducted in the 13 day period following the Port Arthur incident. Of the 685 personnel involved in the incident, 269 underwent defusing, 495 attended psychological debriefing sessions, and 453 were followed-up (many receiving more than one follow-up).

# Chapter 12

# Results

# Chapter 12

# Results

## Overview

Semi-structured interviews were conducted with the 96 Emergency Services personnel involved at Port Arthur at 8 months (Phase 1) and 20 months (Phase 2) after the 'Port Arthur incident'. In addition, each participant was given a booklet of self-administered psychological inventories to complete and return by mail at each phase. The response rate of the 96 participants for the completing and returning their test booklets following the research interview was 72% at Phase 1, and 61% at Phase 2. The overlap between Phase 1 and 2 responders was 46 personnel (48% of the total sample). Statistical comparisons of the responders and non-responder groups at Phase 1 and 2 revealed no significant differences on the following dependent measures:

(i) demographics (age, gender, service history, presence of previous psychological, psychiatric or medical problems),

(ii) incident factors (self-ratings of impact of event and general level of stress, level of perceived threat at the incident), and

(iii) symptomatology (PTSD symptoms as assessed by the clinical interview)

The description and analysis of the results from the Port Arthur study will initially explore the general findings within five key areas:

(i) pre-incident factors,

(ii) experiences at the incident,

(iii) the CISM recovery process, and

(iv) post-incident factors.

The relevant factors for each area will be individually described and where appropriate, analysed against key indices of psychological distress, in particular the IES-R, SCL-90R and the GHQ-28.

Following this analysis, the influential role of two factors in the research study: (i) peritraumatic dissociation at the event and (ii) participation at the subsequent debriefs, will be explored and analysed in more detail.

## 1. Pre-Incident

### *Marital Status*

The breakup of the 96 participants in respect to marital status was as follows:

| | | |
|---|---|---|
| (i) | married | (n = 65), |
| (ii) | defacto | (n = 7), |
| (iii) | single/no long-term relationship | (n = 14), and |
| (iv) | separated/divorced | (n = 10). |

There were no significant differences across marital status for self-ratings of stress and impact. No significant main effects were found on three global indices of psychological sequelae (IES-R, GHQ-28 and SCL-90R).

### *Age*

The mean age for participants was $M = 35.90$ years ($SD = 7.26$). The mean age for the 80 male participants was $M = 37.05$ ($SD = 7.13$), which was significantly higher than that for the 16 females $M = 30.19$ ($SD = 4.89$), $F(1,94) = 13.50$, $p = 0.0004$. There was no main effect for 'age' on the three global indices.

The data was further divided into a 'low' age at entry (<= 18 years) and 'high' age at entry (>18 years) categories. The 'low age at entry' group, (personnel who entered the emergency services at an earlier age), showed significantly greater psychological impact as measured by a number of the SCL subscales:

| | |
|---|---|
| Interpersonal sensitivity, | $F(1,67) = 5.94$, $p = .018$, |
| Depression | $F(1,67) = 4.90$, $p = .030$, |
| Anxiety | $F(1,67) = 4.56$, $p = .036$, |

| | |
|---|---|
| Hostility | $F(1,67) = 4.29$, $p = .042$, |
| Phobic Anxiety | $F(1,67) = 5.43$, $p = .023$, |

and a near significant difference on the SCL Global Scale, $F(1,67) = 3.95$, $p = .051$.

### *Gender*

The self-rating by participants of the impact of their involvement in the incident at Phase 1 revealed a significant main effect for gender, such that at Phase 1, females rated the personal impact of the event (*Impact NOW*) significantly greater than males, $F(1,94) = 6.83$, $p = .011$. No other significant gender effects were evident.

### *Education*

Participant's classification into highest level of education attained showed a trend toward significance on all the IES-R indices:

| | |
|---|---|
| Avoidance | $F(3,65) = 2.08$, $p = .111$, |
| Intrusion | $F(3,65) = 2.60$, $p = .059$, |
| Arousal | $F(3,65) = 2.34$, $p = .081$, and |
| Global | $F(3,65) = 2.73$, $p = .051$. |

The dominant pattern was that participants in post-secondary education group (*Level 3*) scored higher on all IES-R indices. It is interesting to note that although the personnel in the Level 3 group showed a higher level of impact, their level of involvement in respect to number of days was substantially less than other groups. This category is made up of four ambulance officers and one police scientific officer. On closer examination, the effect described may be more correctly interpreted in terms of the impact of differences in operational roles. The GHQ, SCL and IES-R global indices revealed no significant main effect for educational level.

### *Service History*

Participants' mean number of years employed in their current occupational area within the emergency services was $M = 14.81$ ($SD = 7.11$), with the range being from 2 - 33

years. Males had an average of $M = 16.01$ ($SD = 6.88$ ) years of service in their work organisation while females had a significantly lower average of $M = 8.81$ years ($SD = 5.01$), $F(1,94) = 15.80$ , $p = 0.001$. This would appear to be another issue that is possibly obscuring the gender effect previously discussed. There was no main effect of 'service years' on the IES, GHQ or SCL global indices. The findings for age and length of service are representative of the general profile for Tasmanian Police Department personnel and the Tasmanian Emergency Services personnel (Matthew Richman, Co-ordinator of the Tasmanian Emergency Services CISD team, private communication). They are also characteristic of representative of other emergency services samples in international research (see the emergency services research by Marmar et al., 1996a, 1996b).

### *Medical History*

When participants were questioned about their medical history, 23 stated that they had experienced previous major illnesses or injuries, most of which required hospitalisation. There was no significant main effect for 'medical history' on any of the global indices.

### *Previous Psychological Problems*

When participants were asked about any previous psychological problems that required counselling and/or professional support, 21 responded in the affirmative. The SCL-GSI showed a significant main effect, $M$(Yes) = 61.93 ($SD = 11.44$), $M$(No) = 53.44 (SD = 12.89), $F(1,67) = 5.33$, $p = .024$, such that participants with previous psychological problems reported significantly greater psychophysiological and psychological reactions following the incident. There was no main effect for the IES-R or GHQ.

### *Family History of Psychiatric Illness*

Eight participants stated that there was psychiatric illness in their family, seven of those reporting depression as the main issue. There was no main effect of 'family psychiatric illness' for the IES-R and GHQ global indices, however the SCL-GSI scale did show a

trend toward significance such that those responders who had a family history of any psychiatric illness reported less psychophysiological and psychological reactions following the Port Arthur incident, $M$(Yes) = 47.57 ($SD$ = 16.25), $M$(No) = 56.16 ($SD$ = 12.44), $F(1,67)$.= 2.82, p = .098.

### *Previous Critical Incidents*

Participants reported the following types of work-related critical incidents had previously impacted upon them: gruesome death, inability to save life or stop injury, death or injury to young person or child, threat or injury whilst at work, personal connection to victim, and first fatal motor vehicle accident. There was no main effect of 'previous critical incidents' (Yes/No) for the IES-R and SCL-90R global indices. The GHQ scale did show a trend toward significance, $F(1,67) = 3.48$, p = .066, such that those responders who had a experienced impactful previous critical incidents reported greater psychological disturbance, $M$(Yes) = 4.00 ($SD$ = 5.52), $M$(No) = 0.70 ($SD$ = 1.64).

### *Other Stressful Events*

When asked to describe other stressful events in their life, 76 participants listed the following incidents as being stressful: separation/relationship break-up, death of a family member, internal investigations and promotional problems. There was no significant correlations between 'other stressor' scores and the three global indices.

### *Work Stressors*

When participants were asked to describe other stressful events in their life, the most commonly reported work related stressors:

(i) lack of support from management,

(ii) increasing work load,

(iii) understaffing/under-resourcing,

(iv) personality clashes, and

(v) pressure of a new role.

Again, there were no significant correlations with the global indices.

*Personal Stressors*

When asked to describe any major personal stressors they were experiencing, the most common reported responses were:

(i) lack of time with family,

(ii) relationship problems (current partner or ex-partner), and

(iii) financial problems.

Fifty-two participants reported significant personal stressors. These was very little overlap between the 52 'other stressor' responders and the 52 responders of 'personal stressors'.

**2. The Incident**

*Operational Roles*

Participants were asked to describe their primary operational role in respect to the Port Arthur incident. Personnel were grouped into 15 primary operation groups. It is important to note that most personnel performed a number of roles across different operational groups. Their categorisation was based upon what they believed was their primary role in relation to the Port Arthur incident. The breakdown of number of personnel within each primary operational role is detailed below in Table 13.1.

Personnel were further asked to describe their work role in respect to the Port Arthur incident, and what they felt was the most difficult or distressing aspects of their work.

Table 13.1 Numbers of Personnel by Primary Occupational Grouping

| *Primary Operational Group* | *Number of Personnel* |
|---|---|
| First Response | 8 |
| Ambulance | 7 |
| Communications | 8 |
| Crime Scene Investigation | 11 |
| Crime Scene Security | 11 |
| Fire Investigation | 1 |
| Liaison with Public/Media | 2 |
| Logistics | 4 |
| Mortuary | 7 |
| Negotiators | 6 |
| Scientific | 7 |
| Staff Support | 2 |
| Task Force | 6 |
| Technical Surveillance | 4 |
| Witness Statements | 12 |

### *Work Involvement*

Participants were asked how many days of work they were involved in, in respect to the Port Arthur incident. Of the 96 personnel interviewed, 80 attended the Port Arthur site as part of their work assignment. There was no significant difference between personnel who did or did not attend the Port Arthur site on global measures. The amount of time personnel were involved in work related to the Port Arthur incident varied from one day to 150 days. Personnel who were involved for longer than one week had work assignments that included follow-up work after the Port Arthur incident in the Police Force, either in the Scientific /Forensic section and/or the Port Arthur Task Force.

There was no significant main effect for 'number of days involvement' of personnel at Port Arthur across any of the global indices. Categorising participants by the factor of 'exposure to dead bodies' revealed no significant main effect on the IES and SCL.

There was a trend toward significance on the GHQ, $F(1,67) = 3.29$, $p = .074$, such that those participants who were exposed to dead bodies as part of their work detail tended to report greater psychological disturbance $M$(Yes) = 4.78 ($SD$ = 6.14), $M$(No) = 2.59 ($SD$ = 4.25). Further investigation revealed that at Phase 2 this effect has increased. There was a significant main effect of 'exposure to dead bodies' on the GHQ, $F(1,55) = 4.36$, $p = .041$, but not for any other global index. Interestingly, the direction of the effect was opposite to Phase 1, such that those personnel who were exposed to dead bodies at the event reported significantly less psychological disturbance at Phase 2.

### *Personal Reactions*

Participants were asked if any aspects of the Port Arthur incident took on a special significance for them. The issues that were most frequently reported were:

(i) the shooting of children,

(ii) seeing the dead children,

(iii) the grief of the people they had to deal with,

(iv) the enormity of the incident,

(v) the cafe scene (bodies in cafe, surreal scene),

(vi) the toll booth scene, and

(vii) the distress of work colleagues.

When asked which aspects of the event they found most distressing, the most frequent responses were:

(i) the children shot,

(ii) defenseless victims,

(iii) being under fire / the threatening nature of the situation,

(iv) identifying with the victims and how it must have been for them,

(v) the bodies piled up near the back door of the cafe,

(vi) dealing with the relatives of victims,

(vii) the period of time when they were not sure where the perpetrator was, and

(viii) the magnitude of the event.

In general, the impact of the event during the period shortly afterwards appeared to involve personalisation with aspects of the event, or to put it another way, some difficulty in depersonalising or maintaining an emotional distance from the event. Some participants stated that although they had been trained to depersonalise at work incidents, they had found it hard to achieve and maintain this at Port Arthur. As they described, this was due to the enormity of the incident, the number of bodies, the level of personal threat, and/or surrealness of the scene in the cafe. Alternatively, a number of personnel stated that the Port Arthur incident was not as distressing or impactful on them as other critical incidents they had attended previously.

### *Threat*

Participants were questioned about any elements of the event that they found to be personally threatening. There were 34 personnel who found the Port Arthur incident threatening. Their reasons were generally focussed upon the fear of being shot. There was no significant main effect for 'threat' on the SCL-GSI and the GHQ, however there was a significant main effect on the IES-R Global Scale, $M$(Yes) = 18.96 ($SD$ = 17.82), $M$(No) = 9.96 ($SD$ = 11.34), ($F(1,67) = 6.51$, $p = .013$, such that those particpants who found the incident threatening reported significantly greater impact from their involvement with the event at Phase 1.

### *Dissociative Experiences*

Personnel were asked if they were aware of any dissociative experiences they experienced at the time of the incident. Of the 96 personnel interviewed, 56 responded that they had experienced one or more dissociative symptoms. This factor will be explored in detail later in this chapter.

### *Understanding of the Incident*

When participants were asked for their own understanding of what happened at the time of the incident, the most common responses to this question were: a number of people had been shot by a person or persons unknown, there was a mad person with a shotgun, or a gunman had shot a number of people at Port Arthur and had taken hostages.

Initially at the incident, there was a high level of fear amongst many participants as a result of not being clear how many gunmen there were, and where their exact location was. For many personnel, this was the first time they had been in such an intensely threatening situation. When asked if they thought this type of incident could have been predicted or prevented, there were four participants who felt it could have been. There were no significant main effects for this factor on any of the global indices. When asked if they were worried about this type of event reoccurring, there were 27 participants who responded in the affirmative. Again, this factor revealed no significant main effect on global indices.

### ***Recall of Other Incidents***

Finally, participants were asked if they had experienced any situations excluding the Port Arthur incident, where they had recalled any other previous critical incidents in an intense and emotional way. There were 20 personnel who reported in the affirmative. The most frequently reported situations were:

(i) a shooting on the job,

(ii) intense motor vehicle accidents (especially where there were children involved, the deceased/injured was known, or where the incident was particularly gruesome and horrific), and

(iii) suicides and gruesome deaths.

There was no significant main effect on the three global indices for this factor. An analysis of the TSI subscales revealed that those personnel who had experienced intense

recalls of other incidents reported significantly greater intrusive post-traumatic reactions and symptoms:

Intrusive Experiences (IE), $F(1,63) = 4.76$, $p = .033$,

and reported significantly greater activity engaged in modulating, interrupting avoiding or soothing negative internal states through 'acting out' negative emotions:

Tension Reduction Behaviour (TRB), $F(1,63) = 4.07$, $p = .048$).

The TRB scale can also be seen as a gross indicator of a respondent's relative risk for behaviour potentially injurious to self or others when stressed or dysphoric (Briere, 1992).

### *Other Reactions*

Signs and symptoms of critical incident stress were often interpreted as problems and not part of a normal recovery process (Mitchell, 1983). For many personnel the impact of Port Arthur often revolved around personalisation with the victims. Personnel acknowledged that they were trained to depersonalise but found it harder to do at Port Arthur due to the number of bodies, the death of children, the level of personal threat they experienced and the disturbing scene at the cafe. Many personnel experienced dissociative symptoms during their involvement with Port Arthur. It should be stated that some personnel reported that Port Arthur was not as impactful as other critical incidents they had attended. Many personnel reported they felt that the positive community response to the emergency services' involvement at Port Arthur, assisted their recovery process.

## 3. CISM Involvement

Participants were asked to describe any support/assistance they received from the Tasmanian Emergency Services CISD Team, in relation to their work experience with the Port Arthur incident. Thirty-two reported that they had participated in a defuse, 73 reported participating in a group debrief, and 14 reported participating in a one-on-one

debrief session. There were nine personnel who stated that they had not been debriefed. An analysis of the CISM team records revealed that those personnel had indeed been debriefed. I appeared that confusion surrounded the support that personnel believed they had received.

### *Defuse*

When participants were asked to rate the value of the defuse they participated in following Port Arthur, the mean response was 47 out of 100. Personnel were asked for their personal evaluation of the defuse, including any comments on the process generally as well as specifically the defuse they participated in. On the positive side, some participants commented that the defuse had enabled them to develop a good understanding of the event and the roles that others played, and that they found it excellent. On the negative side, some reported that their defuse was too big, too rushed, too early, too late and some felt too pressured about disclosing their feelings.

### *Group Debrief*

Personnel were then asked to briefly describe and assess the group debrief that they had participated in. Initially participants were asked if at the time, they had wished to participate in the debrief process. Just over half the participants (53 of the 96) stated that they did wish to participate in the group debriefs.

Analysis of the data revealed that those personnel who wished to participate in the debriefing process rated their general level of stress at the time of the incident (Stress THEN) significantly higher than those personnel who stated that they did not wish to participate in the process $M$(Yes) = 59.85 ($SD$ = 24.32), $M$(No) = 48.33 ($SD$ = 27.63), $F(1,94) = 4.712$, $p = .032$. 'Wish to participate' revealed no main effect for the self-ratings of personal impact and stress.

Those participants who wished to participate in a debrief also rated the impact of their involvement with the Port Arthur incident on their work attitude and work performance during the period immediately after the incident, significantly higher than other personnel. There was a significant main effect on 'work attitude' at the time of the incident $F(1,94) = 8.01$, $p = .006$, and a significant main effect on 'work performance' at the time of the incident $F(1,94) = 4.34$, $p = .040$, such that those personnel who wished to participate in the debriefs reported a greater level of impact on their work attitude and their work performance. There was no significant main effect for 'wish to participate' on the IES-R, SCL or GHQ scores. There was a significant main effect on one subscale of the SCL-90R, the Somatisation subscale, $F(1,67) = 4.56$, $p = .037$. This dimension reflects distress arising from perceptions of bodily dysfunction, focussing on cardiovascular, gastrointestinal, respiratory and other systems with strong autonomic mediation (Derogatis, 1977).

*Level of disclosure at debrief*

There were 56 personnel who stated that they disclosed their thoughts and feelings of the incident, during the debrief. The operational groups with the highest percentage of disclosure were in order: first response, fire investigation, and mortuary. Further analysis of the self-disclosure variable revealed no main effect on the participant's self-ratings of stress or impact. Those who disclosed their thoughts and feelings of the event at the debrief rated the impact of the incident on their family during the two weeks following the incident as significantly higher, $F(1,94) = 4.50$, $p = .037$. In addition, their ratings of the impact on their work attitude and performance during this period also revealed a significant main effect ($F(1,94) = 10.77$, $p = .002$, and $F(1,94) = 8.76$, $p = .004$ respectively), such that those who disclosed at the debrief rated the impact of their involvement with the Port Arthur incident significantly higher.

There was no significant main effect for self-disclosure on the IES-R global scale or the three IES-R subscales at Phase 1 or 2. There was significant main effect on the global

scale of the SCL such that who did not disclose at the debrief reported higher symptomatology at eight months post incident, $F(1,67) = 4.79$, $p = .032$. There was also a significant main effect on the GHQ score, such that those who did not disclose at the debrief also reported higher symptomatology at eight months post incident, $F(1,67) = 8.43$, $p = .005$. The influence of self-disclosure on personnel's recovery will be further explored later in this chapter.

### *Value of the debrief*

As part of the research interview, participants were also asked to rate the value of the debrief to themselves and to the group as a whole. The mean ratings obtained were $M$(self) = 57 ($SD$ = 33.99) and $M$(group) = 67 ($SD$ = 26.09). Analysis reveales that participants who self-disclosed during the debrief process, rated the overall value of the debrief significantly higher, for themselves, $F(1,68) = 10.21$, $p = .002$ and for the group as a whole, $F(1,63) = 4.18$, $p < .045$, than those who did not disclose at the debrief.

Participants were also asked to rate the debrief process on the six group process and six leadership variables. When their responses were summarised, little influence was evident for any of the twelve variables. However, introducing the self-disclosure factor into the analysis revealed that participants who disclosed their related thoughts and feelings at the debrief rated the level of Communication, $F(1,65) = 5.64$, $p = .020$, Warmth, $F(1,64) = 11.51$, $p = .001$ and Safety, $F(1,64) = 12.12$, $p = .001$, within the debrief process significantly higher than those participants who did not self-disclose. There were no significant main effects for any other of the group process or leadership variables.

## 4. Post-Incident

### *Impact of the Event*

At Phase 1, personnel were asked to rate the personal impact of their involvement in the Port Arthur incident and to rate their general level of stress, for two time intervals:

(v) at the time of the incident and the two weeks following, and

(vi) the two weeks preceding the current interview.

The ratings were to be based on the participant's recollection of the impact and stress from their involvement in the Port Arthur incident. At Phase 2, participants were again asked to rate the impact of the incident at the time it occurred and at the present time.

The mean impact ratings at Phase 1 were:

$M$(Impact THEN) = 65 ($SD$ = 25.47) and $M$(Impact NOW) = 29 ($SD$ = 26.19),

and at Phase 2 were:

$M$(Impact THEN) = 65 ($SD$ = 24.70) and $M$(Impact NOW) = 20 ($SD$ = 22.31).

The mean stress ratings at Phase 1 for the participant's general stress level were:

$M$(Stress THEN) = 55 ($SD$ = 26.35) and $M$(Stress NOW) = 24 ($SD$ = 24.61),

and at Phase 2 were:

$M$(Stress THEN) = 58 ($SD$ = 28.60) and $M$(Stress NOW) = 27 ($SD$ = 24.75).

It is interesting to note the strong consistency on ratings of impact of the event and level of stress for the time of the Port Arthur incident, reported by participants at Phase 1 and 2. It is also interesting to note that the stress ratings were not lower at the second interview than the first.

Other comments from participants in respect to the impact of the event focussed upon the strong community response to the event and the community's positive attitude toward the actions of the emergency services. Participants reported that they felt that this had assisted their recovery. A number said that as a result of their involvement in

the Port Arthur incident they were now proud to wear their uniform and had found the event a positive experience, particularly as a result of the feeling of being more valued by the general community.

### *Signs and Symptoms of Critical Incident Stress*

As part of the research interview, participants were asked to describe the signs or symptoms of critical incident stress (Mitchell, 1983) that they experienced at the time of the incident, and at the present time (i.e. eight months post-incident). Personnel frequently reported experiencing many of the symptoms listed in the interview schedule (See Appendix A, q. 43). Many personnel experienced signs of critical incident stress (mild to extreme) as problems to overcome as opposed to interpreting them as part of a normal recovery process (see Mitchell, 1983). At Phase 1 participants reported experiencing a wide range of intense stress symptoms. A common reaction amongst many personnel who were part of the initial response at the Port Arthur site was fear of an unknown danger. This was particularly evident for personnel who traveled to Port Arthur on the initial Sunday afternoon/evening.

### *Coping styles*

Participants were questioned about the coping thoughts and actions they used to control or manage any stress symptoms they may have been experiencing at the time of the Port Arthur incident. It could be suggested that many of the coping strategies employed by personnel could be classified as avoidant behaviour. The most common strategies reported were:

(i) detaching emotionally and concentrating on my work role,

(ii) keeping busy,

(iii) not dwelling on it after the incident was over,

(iv) exercise, and

(v) withdrawing from others.

Participants were asked if they were able to inhibit their emotional response during that period. Of the 96 personnel, 76 reported that they were able to inhibit their emotional response at the time of their particpation in the incident. When the factors of dissociation at the event and self-disclosure at the debrief were analysed, there revealed no significant main effect on the ability to inhibit emotions measure.

***Post trauma symptomatology***

Participants were questioned about their experiences of symptoms of post-traumatic stress and asked if disturbances from these symptoms of post-traumatic stress had caused them significant distress or impairment in social, work, or other important areas of functioning (as required for a positive diagnosis of PTSD -APA, 1994). Nine participants reported that these symptoms were causing them significant distress at Phase 1 and two participants reported this at Phase 2.

Using the DSM-IV PTSD criterion as a framework (leaving out the requirement that the victime react with fear, hopelessness or horror to the traumatic event), three participants met all criteria for PTSD at Phase 1 and one participant at Phase 2. Other participants were categorised as 'significantly distressed' from PTSD symptoms if they met the PTSD diagnosis on at least one or more subscales. Although they did not meet the full PTSD criteria there was evidence that they were significantly distressed by these symptoms. A third group of participants was categorised as displaying 'post trauma symptomatology' if they met the PTSD diagnosis on at least one or more subscales but reported no significant distress as a result of these symptoms. The breakup of participants for Phase 1 and 2 is shown in Table 13.2.

**Table 13.2** PTSD Symptomatology at Phase 1 and 2.

| | *Phase 1* | *Phase 2* |
|---|---|---|
| Post Traumatic Stress Disorder (PTSD) | 3 | 1 |
| Symptom(s) + Significant Distress | 9 | 2 |
| Post Trauma Symptomatology | 45 | 22 |

One of the participants classified as PTSD at Phase 1 was classified as 'Post Trauma Symptomatology' at Phase 2, whilst another participant moved from the 'Significant Distress' category at Phase 1 to the PTSD category at Phase 2. Finally, one participant who was classified as PTSD at Phase 1 also met the criterion at Phase 2. A breakdown of participant numbers across the key PTSD criteria is presented in Table 13.3.

**Table 13.3** Number of personnel meeting PTSD Diagnostic Subscale requirements at Phase 1 and 2.

| | *Phase 1* | *Phase 2* |
|---|---|---|
| PTSD Intrusion (a) | 36 | 17 |
| PTSD Avoidance (b) | 12 | 9 |
| PTSD Arousal (c) | 22 | 18 |
| PTSD (a, b, & c) | 9 | 6 |
| PTSD (a, b, & c) + distress | 3 | 1 |

## 5. Dissociation

As part of the first round of interviews, personnel were asked if they had experienced any dissociative symptoms at the incident. These questions were based upon Charles Marmar and colleague's (1996a) Peritraumatic Dissociative Experiences Questionnaire (PDEQ). Dissociative symptoms and their response rates are presented in Table 13.4.

**Table 13.4** Breakdown of Number of Responses by Dissociative Experience*

| *Dissociative Experience* | *Response* |
|---|---|
| a. Losing track or blanking out | 17 |
| b. Acting on "automatic pilot" | 45 |
| c. Feeling like you were floating above the scene | 8 |
| d. Feeling disconnected from your body or that your body felt distorted | 9 |
| e. Feeling that what was happening to others was happening to you | 21 |
| f. Not being able to remember everything that happened to you at the time | 16 |
| g. Any other similar experiences | 10 |

N.B. Some personnel experienced more than one symptom

As previously noted, 55 of the 96 personnel reported that they had experienced one or more of the listed dissociative symptoms at the incident. Analysis revealed that at Phase 1, this group of personnel, who experienced dissociative symptoms in relation to their work experience at Port Arthur, reported significantly higher self-ratings of the impact of the event at the time of the event, $F(1,94) = 5.24$, $p = .024$ :

Impact THEN, $M$(Yes) = 69.67 ($SD$ = 22.68, $M$(No) = 57.90 ($SD$ = 4.32),

and at the time of the interview, $F(1,94) = 6.26$, $p = .014$ :

Impact NOW, $M$(Yes) = 34.53 ($SD$ = 29.45, $M$(No) = 21.37 ($SD$ = 2.95).

Further analysis revealed that those personnel who experienced dissociation at the incident were more likely to experience subsequent psychological distress. This was exemplified by significantly higher avoidance scores and global scores on IES-R at Phase 1 (Avoidance, $F(1,67) = 13.18$, $p = .001$; Global, $F(1,67) = 7.03$, $p = .010$). All four measures of the IES-R revealed significant or near significant effects at Phase 2 for dissociation:

| | |
|---|---|
| Avoidance, | $F(1,56) = 3.727$, $p = .0586$; |
| Intrusion, | $F(1,56) = 4.57$, $p = .037$; |
| Hyper-arousal, | $F(1,56) = 8.21$, $p = .006$; and |
| Global, | $F(1,56) = 5.72$, $p = .020$), |

such that personnel who had dissociative experiences during their work role in respect to the Port Arthur incident reported greater post trauma psychopathology. This suggests that there was a negative impact for personnel who experienced dissociative symptoms at the time of the incident, which increased in its distinctiveness during the period from eight months to twenty months following the incident.

On the GHQ, peritraumatic dissociation also revealed a significant main effect, $F(1,67) = 7.36$, $p = 0.009$, such that those personnel who experienced dissociative symptoms at the event revealed greater psychological disturbance. On the SCL-90R scale, peritraumatic dissociation again revealed a highly significant main effect, $F(1,67) = 13.18$, $p < 0.001$, such that those personnel who dissociated at the event reported greater psychopathology. The dissociation group also revealed significantly higher scores on the following SCL-90R subscales:

| | |
|---|---|
| Somatisation, | $F(1,67) = 6.94$, $p = .011$, |
| Obsessive-Compulsive, | $F(1,67) = 4.08$, $p = .047$, |
| Depression, | $F(1,67) = 4.32$, $p = .041$, |
| Anxiety, | $F(1,67) = 4.07$, $p = .048$, |

and near significance on

| | |
|---|---|
| Psychoticism, | $F(1,67) = 3.95$, $p = .051$. |

On the Trauma Symptom Inventory (TSI) subscales, peritraumatic dissociation revealed a highly significant main effect on many of the clinical subscales, such that those personnel who dissociated at the event revealed greater trauma symptomatology. The dissociation group revealed significantly higher scores (i.e. higher symptomatology) on the following TSI subscales:

(i) Anxious Arousal – a measure of symptoms of anxiety, especially those associated with post traumatic hyperarousal, $F(1,63) = 12.24$, $p = .001$,

(ii) Depression - a measure of depressive symptomatology, in terms of mood state and depressive cognitive distortions, $F(1,63) = 7.34$, $p = .001$,

(iii) Intrusive Experiences - a measure of intrusive symptoms associated with post traumatic stress, such as flashbacks, nightmares, and intrusive thoughts, $F(1,63) = 6.47$, $p = .014$,

(iv) Dissociation – a measure of dissociative symptomatology, such as depersonalisation, derealisation, out-of-body experiences, and emotional numbing, $F(1,63) = 9.85$, $p = .003$,

(v) Impaired Self-Reference – measures problems in the 'self' domain, such as identity confusion, self-other disturbance, and a relative lack of self-support, $F(1,63) = 5.37$, $p = .024$, and

(vi) Tension Reduction Behaviour – measures the respondent's tendency to turn to external methods of reducing internal tension or distress, such as self-mutilation, angry outbursts, manipulative behaviour and suicidal threats, $F(1,63) = 4.00$, $p = .049$.

(vii) There was also a significant trend for Anger/Irritability – a measure of self-reported anger or irritable affect, as well as associated angry cognitions and behaviour, in the same direction, $F(1,63) = 3.55$, $p = .0642$.

It is interesting to note that formal measures confirm participants' self-ratings of impact in respect to the impact of experiencing dissociative symptoms at the event.

### *Self-Ratings*

There was a significant main effect for dissociation on many of the participant's self-ratings, such that those personnel who experienced dissociative symptoms at the event rated the impact of the event significantly higher than those participants who did not. Significant main effects were revealed on the following ratings:

(i) impact of the event at the time of the incident (as described on page 131),

(ii) general level of stress at the time of the incident, $F(1,94) = 3.99$, $p = .048$. There was a significant trend at Phase 1, $F(1,94) = 3.84$, $p = .0531$,

(iii) impact on social functioning at the time of the incident, $F(1,94) = 8.29$, $p = .005$,

(iv) impact on their family at the time of the incident, $F(1,94) = 10.99$, $p = .001$,

(v) impact on work attitude at the time of the incident, $F(1,94) = 5.64$, $p = .012$ and at Phase 1, $F(1,94) = 4.23$, $p = .042$, and

(vi) impact on work performance at the time of the incident, $F(1,94) = 6.14$, $p = .015$ and at Phase 1, $F(1,94) = 12.34$, $p = .001$.

This broad and consistent pattern leads to the suggestion that experiencing dissociation at the time of a traumatic event plays a part in development of an extensive and enduring impairment for many personnel across a wide range of areas of functioning. The four operational groups scoring highest on level of peritraumatic dissociation were as follows: mortuary, technical surveillance, scientific and crime scene security. Their common features of distress were the many bodies, the bodies of children, and the fear of being shot. It appears that a key precipitating factor in experiencing peritraumatic dissociation may be experiencing personal physical threat and/or experiencing the dead bodies of adults and children.

### *Other Factors*

Another apparent predictor for experiencing dissociation at the incident was gender, such that there was a greater percentage of females in the 'dissociation group' than the 'no dissociation group' (25% for dissociation versus 14% for no dissociation). Experiencing previous psychological problems proved a key effect (38% for dissociation, 14% for no dissociation). A key factor predicting dissociation during the incident was the participant's reporting feeling physically threatened (96% for dissociation, 24% for no dissociation).

### 6. Self Disclosure at the Debrief

As previously reported, personnel were asked if they had disclosed their own thoughts and feelings of the incident at the debrief they attended following the Port Arthur incident. Of the 96 personnel interviewed, 56 reported that they had. Participants who stated they disclosed at the debrief rated the overall value of the debrief for themselves and for the group as a whole significantly higher than those who did not disclose, $F(1,68) = 10.207$, $p = .002$ and $F(1,63) = 4.177$, $p = .045$ respectively.

An analysis of the effect of self-disclosure on TSI scores revealed that there was a significant main effect on the Impaired Self Reference (ISR) scale, $F(1,63) = 4.20$, $p = .045$, such that scores for those who did disclose were significantly lower than non-disclosers. The Impaired Self-Reference (ISR) scale measures a variety of difficulties associated with an inadequate sense of self and personal identity. ISR items include

(i) problems in discriminating one's needs and issues from those of others,

(ii) confusion regarding one's identity and goals in life,

(iii) an inability to understand one's own behaviour,

(iv) an internal sense of emptiness,

(v) a need for other people to provide direction and structure, and

(vi) difficulties resisting the demands of others.

As reported by Briere (1992), individuals who score high on ISR often appear to have less self-knowledge and less self-confidence than others, may be more influenced by individuals or groups, and may present as easily excitable and less functional under stress. Because ISR reflects difficulties in maintaining a stable sense of self however, this scale is often elevated in the presence of an acutely destabilising stressor, in which case personality dysfunction may or may not be relevant.

Defensive Avoidance (DA) and Dissociation (DIS) scales both revealed significant trends in the same direction, $F(1,63) = 3.72$, $p = .0583$, and $F(1,63) = 3.49$, $p = .0665$ respectively. The Defensive Avoidance (DA) scale consists of those avoidant responses

generally subsumed under the 'C' group of PTSD symptoms. Briere, (1992) reports that those who score high on DA often describe a history of aversive internal experiences that they repeatedly seek to avoid. They also report frequent attempts to eliminate painful thoughts or memories from conscious awareness (e.g. Item 4: "Stopping yourself thinking about the past," or Item 23 "Pushing painful memories out of your mind"). DA endorsers often attempt to avoid events or stimuli in their environment that might restimulate upsetting thoughts or memories. Also reported by high DA responders is the desire to neutralise negative feelings about previous traumatic experiences (e.g. Item 87 "Trying not to have any feelings about something that once hurt you"). DA responses do not represent dissociation or other similar psychological defenses as much as they reflect the conscious, intentional process of cognitive and behavioural avoidance as a way of managing post-traumatic stress.

The Dissociation (DIS) scale measures the extent to which the respondent experiences dissociative symptomatology. Dissociation may be defined as unconscious avoidance behaviour. The DIS scale measures a variety of dissociative experiences, including cognitive disengagement, depersonalisation and derealisation, out-of-body experiences, and emotional numbing. These symptoms represent the most common dissociative responses. Individuals scoring high on the DIS scale tend to report distractibility, 'spacing out,' and feeling out-of-touch with themselves and their bodies. They may report anxiety related to the aversive quality of intense depersonalisation (Briere, 1992).

DIS and ISR is a relatively common 2-point elevation in clinical groups (Briere, 1992), and was a common pattern of response amongst current research participants. Individuals scoring high on both ISR and DIS endorse items suggestive of reduced or altered contact with the external environment, as well as an uncertain sense of their internal experience and/or identity. Such people may have a difficult time understanding or expressing feelings or other internal events and may report relatively little self-understanding or ability to predict their own reactions or behaviour in certain

circumstances (e.g. during stress). In some cases, for example, when a major stressor has produced an acute stress disorder, this profile indicates an individual who feels overwhelmed by trauma (Briere, 1992).

On the SCL-90R scale, self-disclosure revealed a highly significant main effect on the GSI global score, $F(1,67) = 4.79$, $p = .032$, such that those personnel who disclosed at the debrief revealed lower psychological disturbance. The disclosure group also reported significantly lower scores on the following SCL subscales:

| | |
|---|---|
| Somatisation, | $F(1,67) = 6.38$, $p = .014$, |
| Obsessive-Compulsive, | $F(1,67) = 6.42$, $p = .014$, |
| Interpersonal Sensitivity, | $F(1,67) = 5.20$, $p = .026$, |
| Depression, | $F(1,67) = 4.64$, $p = .035$, |
| Psychoticism, | $F(1,67) = 4.25$, $p = .043$, and |
| Paranoid Ideation, | $F(1,67) = 6.24$, $p = .015$. |

There was a trend toward significance on the subscales of

| | |
|---|---|
| Hostility, | $F(1,67) = 3.522$, $p = .065$, and |
| Anxiety, | $F(1,67) = 3.193$, $p = .079$. |

**7. From Impact to Recovery**

When the factors of 'peritraumatic dissociation' and 'self-disclosure' were combined in a two-way analysis of variance, a strong and consistent pattern emerged. Personnel who had experienced dissociation at the incident and subsequently did not self-disclose their thoughts and feelings during the debriefings, revealed significantly greater distress and impairment than other EMS personnel.

This finding was evident across a wide range of diagnostic and self-rating measures. The pattern is exemplified in Figure 11.1 and 11.2, which displays the mean scores on the IES-R for the four 'Dissociation' by 'Disclosure' combinations:

Dissociation and Disclosure (n = 38),

Dissociation and No Disclosure (n = 17),

No Dissociation and Disclosure (n = 18),

No Dissociation and No Disclosure (n = 23),

at Phase 1 and Phase 2 respectively. Note that the distinctiveness of the 'Yes Dissociation/No Disclosure' group increases from Phase 1 to Phase 2, suggesting that the differential impact is increasing over time.

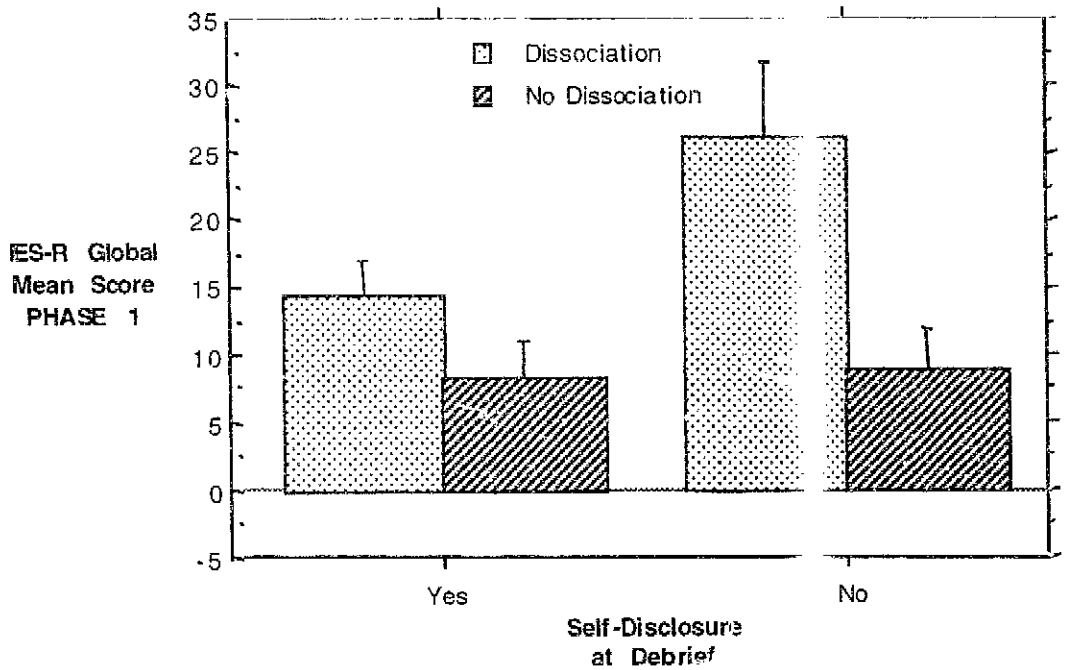


**Figure 11.1** IES-R Global Scores (Phase 1) across the four Dissociation x Disclosure combinations of participant groups.
Vertical lines depict standard errors of the mean

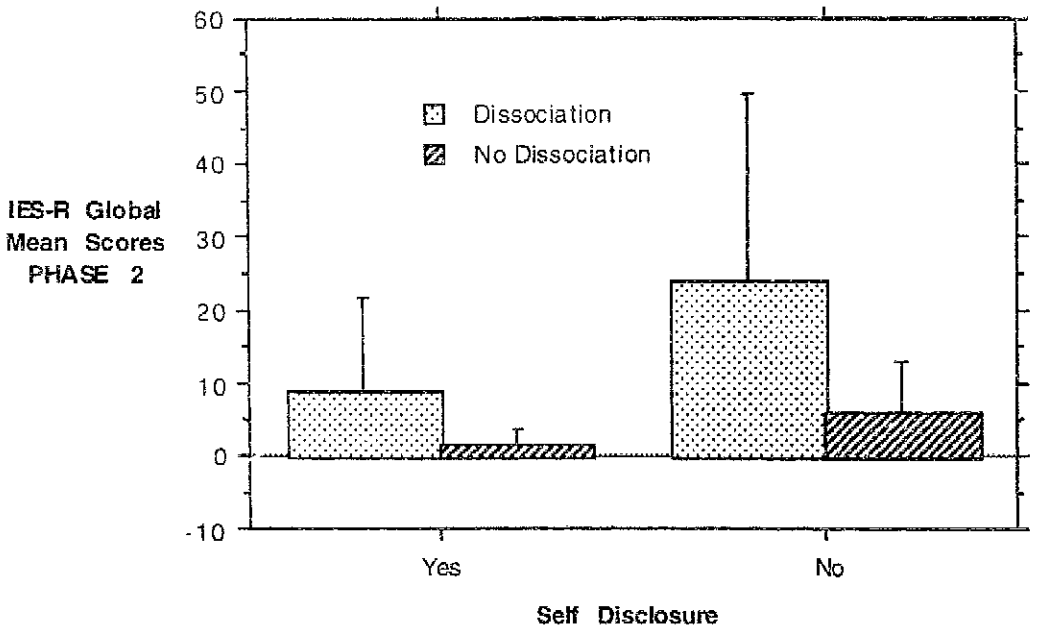


**Figure 11.2** IES-R Global Scores (Phase 2) across the four Dissociation x Disclosure combinations of participant groups
Vertical lines depict standard errors of the means

As might be expected, when participants were further questioned about their involvement in the CISM process, particularly the debriefings, those personnel who wished to participate were significantly more likely to self-disclose during debriefings. Results revealed that within the group of personnel who experienced dissociative symptoms at the scene, those who did not self-disclose at the subsequent debriefings rated their feelings of 'safety' and 'warmth' within the group debriefing process significantly lower than other personnel (see Figure 11.3 for 'level of safety' ratings at the group debriefings).

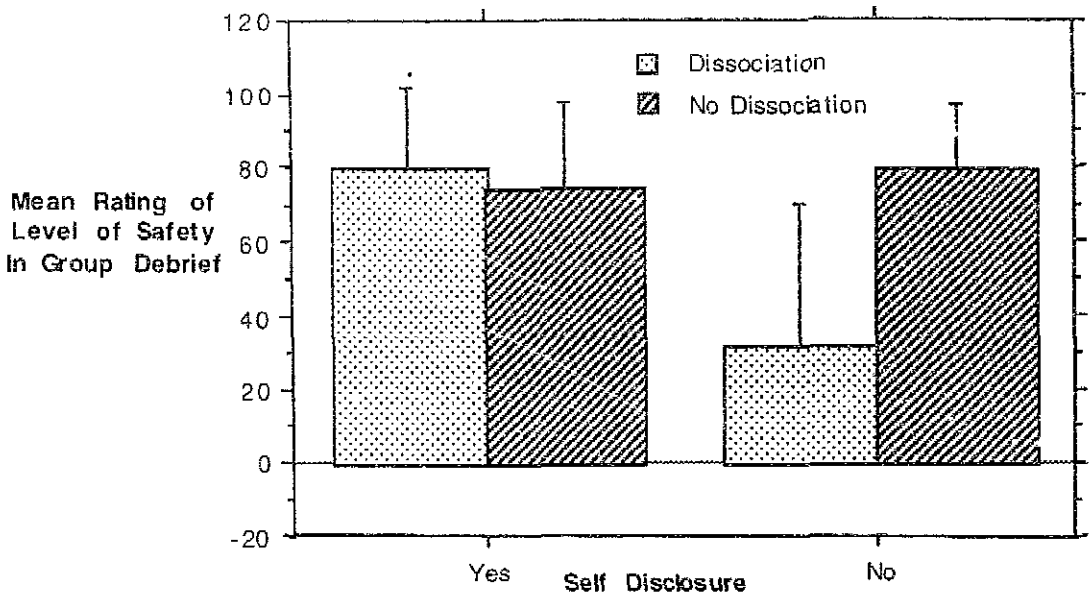


**Figure 11.3** Ratings of Level of Safety in Group Debriefs, across the four Dissociation x Disclosure combinations of participant groups Vertical lines depict standard errors of the means

*Assessment of Post Trauma Symptomatology*

Finally, participants who experienced dissociation at the event and who subsequently did not self-disclose at the debriefing, revealed significantly greater PTSD symptomatology. Table 11.1 represents the percentage of personnel meeting the three major symptom clusters of the PTSD diagnosis criteria:

(i) the B criteria (intrusive re-experiencing of the event),

(ii) the C criteria (avoidance and numbing reactions associated with the event), and

(iii) the D criteria (symptoms of increased physiological arousal);

across the four Dissociation x Disclosure combinations at Phase 1 and 2 respectively.

**Table 11.1** Percentage of research participants meeting the DSM-IV b, c and d diagnostic criteria for PTSD across the four Dissociation x Disclosure participant combinations

| | *Dissociation/ Disclosure* | *Dissociation/ No Disclosure* | *No Dissociation/ Disclosure* | *No Dissociation/ No Disclosure* |
|---|---|---|---|---|
| *Phase 1* | 10.5% | 29.4% | 0% | 0% |
| *Phase 2* | 6.1% | 23.3% | 6.5% | 0% |

Again note the increased distinctiveness of the 'Yes Dissociation/No Disclosure' group from Phase 1 to Phase 2. This consistently striking result suggests that the impact of dissociative experiences at the critical incident, which may lead to long-term impairment, may be substantially reduced by the active participation of personnel in the subsequent psychological debriefings.

# Chapter 13

# Discussion

# Chapter 13

# Discussion

## Introduction

Among the most important unanswered questions involving the impact of traumatic stress are:

- who are experiencing persistent difficulties after a period of normal stress response ? and
- why does this subgroup go on to develop a symptomatic response that, at its extreme, is diagnosable as PTSD ? (Westerink, 1995).

Although there has been substantial research into the psychological processes that characterise those people who experience PTSD, considerably less is known about the risk factors for developing problems after exposure to a traumatic event, and what techniques are effective in assisting people to reduce the impact of an event and/or assist in their recovery.

This thesis has focused on two areas of trauma research:

(i) the impact of psychological trauma on individuals, including any resultant psychopathology, and

(ii) the effectiveness of early intervention methods, in this case CISD, on their process of recovery.

In general, the findings from the Port Arthur study have revealed that emergency services personnel experienced a range of negative as well as positive outcomes as a result of their direct or indirect involvement in the Port Arthur incident. For some personnel, exposure to a range of traumatic stressors (both primary, in sense of perceiving direct physical threat, and secondary, in the form of witnessing the emotional suffering and distress of others) proved to have a strong negative impact on their response to the incident. Results also revealed that an individual's method of coping with the trauma, both at the event and in the period immediately following the event, was strongly associated with the success or

otherwise of their recovery. During the event, the process of denial and suppression of emotional reactions by personnel (adaptive dissociation) may have optimised their work performance during the incident. However, the results also suggest that such practices may have a significant negative impact on their recovery after the event. Assessment of the coordinated recovery process of Critical Incident Stress Management (CISM) that followed the Port Arthur incident reveals that active participation and self-disclosure by personnel in the subsequent group debriefs may have been pivotal in their recovery from the negative impact of the event.

## The Impact of Psychological Trauma

### *Individual Responses*

A prime directive of the human brain is to promote survival (Perry, 1999). As a result, the brain appears to be over-determined to sense, process, store, perceive and mobilise in response to threatening information from both external and internal environments (see Goldstein, 1995). In the face of intense physical threats, all areas of the brain and body are recruited and coordinated for optimal survival. Part of the body's survival kit includes an instinctive response that prevents the experience of physical pain (Siegfried, Frischknecht & de Sousa, 1990). Similarly, the body appears to have as part of this instinctive response, a limiting switch for psychological pain, which is tripped to protect the individual from emotional distraction during a threatening situation.

It is argued that trauma symptoms are adaptive and appear to have originally evolved to help a person recognise and quickly respond to a dangerous situation (van der Kolk et al., 1995a). In most cases, these symptoms resolve within a few days or weeks of a disturbing experience. Therefore it is clear that not everyone who experiences a traumatic event will develop PTSD. But when a number of symptoms persist for weeks or months or when they are extreme, they may be suggestive of a psychiatric disorder such as PTSD.

In the first phase of the interviews of the Port Arthur Research Project, participants reported experiencing a wide range of intense stress symptoms. A common reaction amongst personnel was fear of an unknown danger. This was particularly evident for personnel who travelled to Port Arthur on the initial Sunday afternoon/evening, when early reports were of one or more gunmen running rampant and a rising death toll. While this fear was highly appropriate on the afternoon of the incident, one officer reported a fear of the dark for an extensive period following the event. It took two weeks before he could walk around his house and four weeks before he felt comfortable outside. Another crime scene investigator reported that he saw the face of one particular little girl who was killed during the incident, every time he closed his eyes for two months after the incident.

### *Dissociation*

While many organisations assist personnel in developing skills to 'cope' with intense situations in order to undertake their duties most effectively, awareness needs to be raised in respect to the inherent risk in such practices. It has been suggested that peritraumatic dissociation is highly predictive of PTSD (Marmar et al., 1998, van der Kolk, 1997). Dissociation may be defined as a largely unconscious defensive alteration in conscious awareness, developed as an avoidance response to overwhelming, often post-traumatic, psychological distress (Briere, 1992). There have been strong replicated findings relating peritraumatic dissociation with subsequent post-traumatic stress (Marmar, 1997). There have been two key lines of investigation into the underlying mechanisms for peritraumatic dissociation. Contemporary psychological studies have focussed on individual differences in the threshold for dissociation (see Spiegel et al., 1988). A second line of investigation has centred on the neurobiology and neuropharmacology of fear and anxiety (e.g. Perry, Southwick, Yehuda & Giller, 1990; LeDoux, 1998; Southwick et al., 1993). Recent observations suggest that high levels of anxiety or arousal during the trauma may mediate the relationship between peritraumatic dissociation and post-traumatic stress.

As part of the first phase of interviews in the Port Arthur Research Project, personnel were asked if they had experienced any dissociative symptoms at the incident. Of the 96 personnel interviewed, 55 reported that they had. Dissociative symptoms included:

(i) losing track or blanking out,

(ii) acting on 'automatic pilot',

(iii) feeling as though they were floating above the scene,

(iv) feeling disconnected from their body or their body feeling distorted,

(v) feeling that what was happening to others was happening to them,

(vi) feeling a sense of unreality in what was happening, and

(vii) feeling unaware of things that had happened at the scene.

Initial analysis revealed that peritraumatic dissociation was a highly significant predictor of later psychological distress. This was exemplified by scores on IES-R, which were significantly higher at Phase 1 and Phase 2 for personnel who had experienced dissociative symptoms at the Port Arthur incident. Dissociation also proved to have a significant relationship to subjects' self-ratings of the negative impact of the event on their social, family and work functioning. This broad and consistent pattern leads to the suggestion that dissociating at the event led to extensive and enduring impairment for many personnel.

In 1996, Marmar and colleagues reported on individual differences in the level of peritraumatic dissociation during critical incident exposure in emergency services personnel. They found the following factors to be associated with greater levels of peritraumatic dissociation:

(i) higher levels of exposure during the incident,

(ii) greater subjective perceived threat at the time of the incident,

(iii) younger age,

(iv) poorer general psychological adjustment,

(v) poorer identity formation,

(vi) lower levels of ambition and prudence (as defined by the Hogan Personality Inventory),

(vii) greater external locus of control, and

(viii) greater use of escape-avoidance and emotional self-control coping.

The Port Arthur research findings also revealed individual differences in the level of peritraumatic dissociation in emergency services personnel during the incident. The following factors were found to be associated with greater levels of peritraumatic dissociation:

(i) gender (being female),

(ii) early age of entry (<19 yrs) into the emergency services,

(iii) a prior history of treatment for psychological problems,

(iv) greater subjective perceived threat at the time of the incident,

(v) greater level of anxiety/distress at the incident, and

(vi) higher levels of exposure to dead bodies.

In addition, peritraumatic dissociation proved to have a significant relationship with a number of other research factors including:

(i) greater impact on personal, social, family and work functioning,

(ii) greater use of avoidant coping strategies,

(iii) greater levels of somatisation, depression, and anxiety,

(iv) greater levels of intrusive experience,

(v) inadequate sense of self and personal identity,

(vi) a tendency to externalise distress and 'act out' negative affect,

(vii) greater ongoing tendency to avoid overwhelming distress through habitual dissociation such cognitive disengagement, and

(viii) emotional numbing.

The role of cause and effect is unclear for many of these factors. They may all represent signs or symptoms of chronic traumatisation, including the presumably habitual peritraumatic dissociation.

The results also support Bessel van der Kolk's (1997) assumption that the risk factors for secondary traumatisation include exposure to stories or images of victims (note the impact on personnel who took the witness statements), and empathic sensitivity to others suffering (many personnel stated that at times they experienced difficulty in depersonalising or maintaining an emotional distance from the event). It is clear that the related symptoms of primary and secondary traumatisation affected many personnel in the current study.

Taken together, these findings suggest that emergency services personnel with:

(i) more vulnerable personality structures,

(ii) higher subjective levels of threat and/or distress at the time of the incident,

(iii) greater reliance on the external world for an internal sense of safety and security, and

(iv) greater use of 'risky' coping strategies, including peritraumatic dissociation,

are likely to suffer greater psychological and physiological disturbance following a traumatic experience.

*Implications*

The military and emergency services train personnel to modify their actions during extremely stressful situations in such a way as to optimise their survival behaviours (van der Kolk, 1997). While assisting staff to develop skills to 'cope' with intense situations and undertake their duties most effectively is clearly a necessary part of emergency services training, it would appear that there needs to be greater awareness of the inherent risk in such practices. The ability to control an emotional response may be seen as an effective way of coping during an incident but there is clearly a danger that this adaptive

behaviour may also become the source of post-traumatic stress. The Port Arthur results reveal that experiencing dissociation during a critical incident, despite its adaptive value of enhancing operational effectiveness at the time, may lead to broad and enduring impairment for many personnel.

To disentangle cause and effect relationships in the trauma-dissociation connection, future studies will need to further examine dissociative tendencies in populations exposed to trauma (Marmar, 1997). It remains to be demonstrated whether trauma determines greater vulnerability to dissociative responses, both generally and specifically, with respect to peritraumatic responses. It will also be of interest to determine what factors may protect against pathological dissociation and determine prospectively if resilience factors reduce the risk of developing subsequent PTSD.

## The Effectiveness of Debriefing

### *Debriefing*

Following a traumatic event, the 'experience' may become an integral part of a person's life (van der Kolk & van der Hart, 1995). Sorting out exactly what happened and sharing personal reactions with others may make a great deal of difference in a person's eventual adaptation. Putting the thoughts and feelings related to the trauma into words is seen by many authors as essential in the treatment of post-traumatic reactions (van der Kolk, 1997. Herman, 1992, Goleman, 1996).

It is generally accepted in the emergency services that once a critical incident has occurred there is a need to provide help for those personnel suffering from acute stress reactions. The goal of such crisis intervention is the resolution of the immediate crisis and the restoration of the person to their prior level functioning (Mitchell & Everly, 1996). It is accepted within the crisis response literature that recovery from trauma is founded upon the verbal expression of cognitions and emotions relevant to the traumatic event (Mitchell & Everly, 1998). In their review of crisis psychiatry, Spiegel and Classen

(1995) noted the importance of cognitively processing the crisis. Pennebaker and colleagues in a series of experiments have demonstrated the value of expressing oneself (as part of the recovery process) across a range of psychological, physiological and behavioural outcome measures (Pennebaker 1985, 1990, 1993; Pennebaker and Beall, 1986; Pennebaker and Susman, 1988).

Psychological debriefing is an intervention frequently utilised by the emergency services to encourage participants to recount their traumatic experience, focusing on related facts, thoughts, feelings, and reactions. Psychological debriefing has pervaded most mental health communities in their preparation for and response to disastrous events involving humans. However, as pointed out previously, the question of whether or not debriefing is an efficacious or necessary intervention in traumatic situations has been a point of debate for several years (Bisson & Deahl, 1994; Ostrow, 19[illegible] [illegible]aphael, Meldrum, & McFarlane, 1995). A common methodology of early CISD research has been to survey the people involved in a traumatic incident who were subsequently debriefed and then to seek information about their subjective impression of the value of the intervention (Dyregrov, 1997). Recently there has been a shift toward research designs that pay greater attention to scientific rigour. In addition, researchers are yet to develop a strong theoretical understanding of the relationship between post-traumatic stress and psychological debriefing. Although Everly (1993) provided a neuro-physiological explanation for stress with applications to critical incident stress, little empirical support [illegible] assist in understanding the process and impact of psychological debriefing.

The Port Arthur research participants were asked a range of questions about their understanding of and involvement in the CISM recovery process, including their level of self-disclosure (how much they disclosed their thoughts and feelings of the event) during the group debriefs. Level of self-disclosure at the debrief did not prove to have a significant relationship with the general measures of post traumatic stress or psychological distress. Results did reveal that those personnel who self-disclosed

during debriefs perceived a higher level of safety and warmth within the debriefing process, and rated the overall effectiveness of the process significantly higher than other personnel.

### *Dissociation and Self-Disclosure*

When the factors of peritraumatic dissociation and self-disclosure were combined in a two-way analysis of variance, a strong and consistent pattern emerged. Personnel who had experienced dissociation at the incident and did not self-disclose their thoughts and feelings during the subsequent group debriefs revealed significantly greater distress and impairment than other EMS personnel. This finding was evident across a wide range of diagnostic and self-rating measures. As might be expected, when participants were further questioned about their involvement in the CISM process, particularly the debriefings, those who wished to participate were significantly more likely to self-disclose during debriefings. Results revealed that within the group of personnel who experienced dissociative symptoms at the scene, those who did not self-disclose at the subsequent debriefing rated their feelings of 'safety' and 'warmth' within the group debriefing process significantly lower than other personnel.

Finally, participants who experienced dissociation at the event and who subsequently did not self-disclose at the debriefs, revealed significantly greater PTSD symptomatology at Phase 1 and 2. This consistently striking result suggests that the impact of experiencing dissociative symptoms at the incident, which may lead to long-term impairment, may be substantially reduced by the active participation by personnel in the subsequent group debriefs.

### *Implications*

Clearly, there are several areas that continue to require empirical validation in the field of psychological debriefing. Since its inception there have been few controlled studies regarding the efficacy of these techniques. Case studies, anecdotal reports, and the

occasional randomised investigation have resulted in varied positive, negative, or neutral findings (Rose and Bisson, 1998). The results of the present study offer insight into how the impact of biological changes caused by trauma can be modified by the psychological processing of the event. The results of the current study suggest the importance of continuing to develop our theoretical understanding of the psychological debriefing process.

The experience of working with people shortly after traumatic incidents provides a unique view of their 'injury' and suffering. The present enquiry into the experiences (prior to, during and immediately following a traumatic event) of those personnel who went on to develop longer term PTSD symptoms has shown that this period can be crucial to the development of their condition. One of the implications of this study is that problems are evident in the provision of early crisis intervention. The first task then is to identify those likely to suffer later problems and the second is to overcome their reluctance to engage in recovery programs.

Presently, the use of CISD and similar psychological debriefing techniques have been suggested as methods for the prevention of PTSD and for mitigating the harmful effects of work-related trauma (Mitchell & Everly, 1997). Many debriefing proponents suggest that all persons exposed to the aforementioned events or occupations should routinely undergo psychological debriefing. The appropriateness of utilising psychological debriefing in every case is questionable. It is clear that the participants in debriefing in the Port Arthur study were more likely to benefit from the debrief if they wished to share and discuss their thoughts and experiences, and thus actively participate. It could also be suggested that those personnel in most need of debriefing following a traumatic incident were those who experienced peritraumatic dissociation.

It needs to be borne in mind, however, that a possible cost of this type of intervention is re-traumatisation or vicarious traumatisation of the rest of the work team (Dyregrov,

1998). Therefore, any review of such interventions would have to identify the person or persons for whom the CISD was conducted and assess their emotional change separately from the rest of the group. If CISD is helpful, the person or persons having trouble coping should show improvement and be able to sustain the improvement. However, those who were initially coping well, may initially show a deterioration but should be able to regain their well-adjusted position within a short time and maintain it in the long-term (Dyregrov, 1998). In the case of the emergency services, the possibility of temporary re-traumatisation is willingly accepted to help colleagues who are hurting and who may be needed at the next job, functioning fully. However, Dyregrov suggests that such re-traumatisation is unnecessary for civilians, who should be left to recover without intervention.

Kulka and colleagues (1990) reported that 15% of Vietnam veterans experienced PTSD or other psychological problems at the time of their study. Conversely, this suggested that 85% of these veterans were relatively problem-free. A majority of people exposed to traumatic events may not be in need of crisis intervention or psychological debriefing. In 1994, Koopman, Classen, and Spiegel cautioned against indiscriminate use of psychological debriefing. They stated that assessment of certain factors, including subjective levels of arousal, current coping processes, cognitive impairments, or past exposure to previous trauma, did not often occur prior to providing these interventions. Consequently, the absence of assessment, as well as the failure to address these factors, may be seen in the reasons why debriefing has failed to systematically yield positive results for all individuals exposed to a traumatic event.

Marmar (1997) has suggested that future research will need to clarify the relationship between subjective threat appraisal, emotional distress at the time of the trauma, activation of CNS structures that regulate threat arousal, and psychophysiological arousal in the peripheral nervous system. Specific treatment interventions for peritraumatic dissociation will depend on rapid identification of those experiencing peritraumatic

dissociation and advances in understanding the psychological and neurobiological factors underlying trauma-related dissociation. The Peritraumatic Dissociative Experiences Questionnaire PDEQ (Marmar et al., 1994) may be useful as a screening device to identify those experiencing acute dissociative responses at the time of exposure to traumatic stress. From a neuropharmacological point of view, Pitman (personal communication, in Marmar et al., 1998) has advocated using medications that lower threat-arousal levels at the time of trauma. Alpha-2 adrenergic agonists, beta-blockers, or other non-sedating anti-arousal agents could be provided to emergency services personnel to aid in the modulation of arousal responses to life-threatening or gruesome exposure (Perry, Giller, & Southwick, 1987), in order to reduce the negative long-term impact of high arousal and dissociation. Advances in CISD procedures may lead to psychological interventions that lower immediate threat arousal and consequently reduce the likelihood of sustained dissociation and subsequent psychopathology.

LeDoux and others would argue that exposure to a feared stressor can produce permanent changes in how the brain responds to similar stimuli that are ambiguous and only potentially dangerous similar stimuli. If this is true, then perhaps trauma interventions may need to concentrate on the subsequent realisation that an ambiguous stimuli is not so fearful after all (Baldwin, 2001). The aim would be to cut short the fight/flight arousal response rather than to prevent it. This may remain an open empirical question for some time.

Recent studies, including the present Port Arthur findings, appear to suggest that more rigorous investigation of the effectiveness of psychological debriefing and its role in post-trauma recovery is required. Therefore, it is important that attempts be made to continue to assess the value of psychological debriefings and to examine the parameters effecting the CISM process including:

(i) whether information giving is productive,

(ii) when it is best given and by whom,

(iii) what information is useful to whom,

(iv) furthering our understanding of the impact of self-disclosure,

(v) if debriefing is to play a screening role, what are the early warning signs and how are they best detected,

(vi) who should provide debriefing,

(vii) how debriefing is to be provided,

(viii) considering that there are a number of different models, which model is most appropriate one and to whom,

(ix) what is the most appropriate timing (there is a commonly held belief that debriefing should be held close in time and space to the actual trauma, and a time of 72 hours has been identified as the upper limit), and finally,

(x) debriefing needs to clarify its purpose (is its main purpose preventative intervention or is it to 'bond' participants).

It is clear that establishing a greater understanding of debriefing mechanisms will provide a pathway to the development of empirically supported uses of psychological debriefing. According to Agras (1997), understanding the factors related to successful interventions can be derived by analysing studies that utilise procedures believed to be central to therapeutic change. Research is needed to clarify the benefits of debriefing, as well as isolate the most effective components. Much of the research on debriefing may therefore be premature because there is not a scientifically sound theoretical understanding of event-related distress and debriefing, as little empirical support exists to assist in understanding the impact of debriefing. A learning or conditioning conceptualisation may advance the shortage of theoretical approaches to PTSD and debriefing, as was undertaken by Keane, Zimering, and Caddell (1985) with PTSD and exposure-based treatment. This treatment has since been acknowledged as an empirically supported intervention.

**Conclusions**

Findings that have emerged since the original definition of PTSD have contradicted its original theoretical principle, i.e. that the response to trauma, as described by the diagnosis of PTSD is essentially a normative one (Andreasen, 1980; Horowitz, 1986; Figley, 1989; Green et al., 1985; Wolfe & Keane, 1990; Herman, 1992; Yehuda & McFarlane, 1995). As researchers continue to provide evidence for:

- the relative rareness of the disorder following exposure to trauma (Davidson et al., 1991; Shore et al., 1989; Card, 1987, Breslau et al., 1991, Kulka et al., 1990; Southwick et al., 1993),
- the existence of risk factors other than the trauma as predictors of PTSD (Davidson et al., 1991; Shore et al., 1989; Card, 1987; Southwick et al., 1993; McFarlane , 1989; Bremner et al., 1993; Emery et al., 1991; Resick et al.,1992), and
- the atypical rather than normative nature of the biological stress response in PTSD (Yehuda et al., 1993; Davidson et al., 1991; Freedy et al., 1992; Green et al., 1992; McFarlane, 1992),

there is a need to reassess the underlying processes of PTSD and the defining characteristics. Yehuda and McFarlane (1995) have suggested that the future of the traumatic stress field hinges upon clarification of the theoretical inconsistencies that have arisen.

One benefit of the contribution of the PTSD diagnostic classification to research has been it has made manifest an observational framework for studying the effects of stress and trauma. It appears that PTSD provides a model for the process of adjustment to or destabilisation resulting from trauma that has biological and psychological dimensions. Biological investigations have demonstrated that the substrates of the disorder may not in fact be similar to the 'normative stress response' described by Selye (1956). They may indeed be a progressive sensitisation of biological systems that leave an individual hyper-responsive to a variety of stimuli.

Research studies, including the present Port Arthur study, exploring the processing of traumatic information have provided insight into the underlying psychological mechanisms in operation during a person's reaction to and recovery from a traumatic experience. They have helped us to understand that the process of depersonalisation and dissociation that routinely occurs within many emergency services may provide short-term benefits but also long-term risks. Adaptation to stress protects personnel at the time of a critical incident in order that they may carry out their tasks effectively. However, adaptive dissociation, along with the resultant lack of 'integration' of traumatic memories after an incident, may indeed lead to long-term psychological disturbance. Understanding the relationship between trauma, memory and dissociation has the potential to be useful in planning treatment and management of traumatic stress. Dissociation has been proposed by Hersch (2000), as the basic underlying mechanism in all trauma related disorders. It is emerging as the critical element that predicts and probably sustains the development of chronic reactions to traumatic life experiences (van der Kolk, 1996). The results of this study suggest that psychological debriefing may provide a defence against the chronic effects of peritraumatic dissociation.

Our current understanding of trauma suggests that following a traumatic situation we need to process and integrate the memories of that event if we are to 'recover'. Given our current state of understanding of how the brain processes information during traumatic experiences, the process of psychological debriefing following a traumatic incident provides an ideal opportunity for the commencement of a necessary recovery process. Again, the findings in the present study support such a thesis. It appears that psychological debriefing can assist emergency services personnel in managing what might otherwise develop into long-term psychological and physiological disturbance. However, some personnel who may have experienced dissociative symptoms at an event may not feel safe to disclose within a standard group debrief. It could be suggested that an assessment of dissociation should be incorporated into the CISM model and those

reluctant to disclose should be provided with safer opportunities to integrate their experience and accept their responses.

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*SECTION 3*

*APPENDICES*

# Appendix A

## Interview Protocol

*1. Demographics*

**Personal Details**

1. Identification No.

2. Marital Status (Married, De-facto, Separated, Divorced, Single)

3. Age

4. Children (Gender and Ages)

5. Gender

6. Date of I/V

7. Present Living Situation (e.g. living with wife and kid)

8. Highest Level of Education (e.g. Matriculation, BA, or TAFE certificate)

9. Service History (include location, position, job role, and duration)

10. Medical History (major illnesses and hospitalisations)

11. Previous Psychological Problems that required counselling support

12. Family History of Psychiatric Illness

**EMS Experience**

14. Can you tell me about any *previous Critical Incidents of a traumatic nature* (other than Port Arthur) that you have been involved in (include level of involvement, aspect causing distress, and level of impact/distress) **(Rating 1)**

15. Can you describe *any other major stressful events* have you experienced in your work or personal life? (include recency, nature of event, and level of distress ) **(Rating 2)**

16. What do you see as your *major stressor(s) at work* (brief details) **(Rating 3)**

17. What do you see as your *major stressor(s) in your personal life* (brief details) **(Rating 4)**

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*2. The Incident*

21. I'd now like you to *describe to me your work experience in relation to the Port Arthur Incident*, your involvement at the time and since, including how you were first notified of the event.

22. Did any aspects of the event take on a *special significance* for you

23. What aspects of the event did you find *most stressful*

24. Did the event cause you to recall of any previous traumatic experiences or events

25. Were there any elements of the event you found threatening **(Rating 5)**

26. Did you have any of the following experiences at the time of the incident or after

a. Losing track or blanking out

b. Acting on "automatic pilot"

c. Feeling like you were floating above the scene

d. Feeling disconnected from your body or that your body felt distorted

e. Feeling that what was happening to others was happening to you

f. Not being able to remember everything that happened to you at the time

g. Any other similar experiences

27. Rate your *personal satisfaction with own work performance* on the day. **(Rating 6)**

28. Which work elements were you particularly happy or unhappy with

29. Describe *personal satisfaction with work performance of colleagues* on the day. **(Rating 7)**

30. Which work elements of your colleagues were you particularly happy or unhappy with

31. What was your *understanding of what happened* at Port Arthur at the time of the incident.

32. Do you have any ideas as to *why* it happened

33. Do you think it could have been *prevented* (Y/N)

34. Are you *worried* about this type of event occurring again (Y/N)

35. Excluding the Port Arthur incident, have you been in any situations where you've *recalled any previous CIs* in an intense/emotional way (Describe event, focus of recall, emotions. aspects of special significance).

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*3. Response to Critical Incident*

Critical incidents can cause a range of responses in EMS personnel. I'd like to look at what *signs and symptoms* of critical incident stress you may have experienced as a result of Port Arthur incident.

40. Can you rate the *impact* of the Port Arthur incident on yourself, at the time & in the last 2 weeks **(Rating 8)**

41. Rate your *general stress level* at the time of the incident and now **(Rating 9)**

42. What *signs or symptoms of critical incident stress* did you experience *at the time*

43. What signs or symptoms are you experiencing *now*?

Check participant for each area of stress for Questions 42 and 43

**Physical**

a. sleep disturbance,

b. physical tension,

c. difficulty breathing,

d. increased heart rate,

e. change in physical activity,

f. change in energy level,

**Cognitive**

o. thoughts of the event, ,

p. safety of family,

q. feeling unsafe,

r. intrusive thoughts,

s. sense of humour,

t. closeness to death,

**Emotional**

g. emotionally flat,

h. emotionally distressed,

i. anger,

j. depression,

k. sadness,

**Interpersonal**

l. social withdrawal,

m. more outgoing,

n. feeling of group identity

**Behavioural**

u. irritability,

v. appetite change,

w. change in level of sexual activity,

x. increase or decrease in smoking,

y. increase or decrease in alcohol,

z. increase or decrease in other drugs,

aa. re-experiencing of event ,

bb. avoiding reminders of the event,

| **Effect of Incident on Other Areas of Functioning** | **(Rating 10)** |
|---|---|
| 44. What effect did the Port Arthur incident have on your *social activity* | (rate & describe) |
| 45. What effect did the Port Arthur incident have on your *family activity* | (rate & describe) |
| 46. What effect did the Port Arthur incident have on your *family member* | (rate & describe) |
| 47. What effect did the Port Arthur incident have on your *attitude to work* | (rate & describe) |
| 48. What effect did the Port Arthur incident have on your *work performance* | (rate & describe) |

## Post Trauma Symptomatology

The next few questions relate to any examples of more extreme distress you may be or have experienced as a result of your involvement with Port Arthur. (For the following questions detail Yes/No and duration of symptoms)

## Re-experiencing the Trauma

49. Have you experienced:

a. recurring and intrusive *distressing recollections* of the event, including images, thoughts, or perceptions.

b. recurrent *distressing dreams* of the event.

c. acting or feeling as if the traumatic event *were reoccurring* (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur upon awakening or when intoxicated).

d. intense *distress* after exposure to any triggers that relate to an aspect of the event

e. *a strong physical reaction* after exposure to any triggers that relate to an aspect of the event

## Avoidance

50. Have you *persistently avoided* any stimuli associated with the event and felt a numbing of your general responses (that wasn't present before the CI), as shown by

a. efforts to avoid thoughts, feelings, or conversations associated with the trauma

b. efforts to avoid activities, places, or people that arouse recollections of the trauma

c. inability to recall an important aspect of the trauma

d. considerably diminished interest or participation in important activities

e. feeling of detachment from others

f. restricted range of emotions (e.g., unable to have loving feelings)

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

## Hyperarousal

51. Have you experienced persistent symptoms of *increased arousal* (not present before the CI), as indicated by :

a. difficulty falling or staying asleep

b. irritability or outbursts of anger

c. difficulty concentrating

d. hypervigilance

e. an exaggerated startle response

**Distress**

If participant did not respond Yes to any previous q. in this block skip 52.

52. Have these disturbances caused you *significant distress or impairment* in social, work, or other important areas of functioning.

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*4. Coping/Resources*

I would now like to discuss what *activities and resources* you may have used or had available to you to *assist in coping* with the stress of the incident.

60. What *coping thoughts and actions* did you use to manage any stress symptoms you may have been experiencing at the time of the Port Arthur incident

61. Can you describe any *intense emotional reactions* you experienced during this time

62. Were you able to *inhibit your emotional response* during that period (Y/N) **(Rating 11)**

If No then go to 64

63. *If you did* successfully inhibit your emotional responses at the CI, have you since been able to in some way *reconnect with those emotions.*

64. Did you feel you had *someone to talk to* about the event and your experiences? Y/N

| **External Support** | **(Rating 12)** |
|---|---|
| 65. What level of support did you receive from *fellow workers* | (rate & describe) |
| 66. What level of support did you receive from *friends* | (rate & describe) |
| 67. What level of support did you receive from *superiors* | (rate & describe) |
| 68. What level of support did you receive from *family* | (rate & describe) |

69. How *open* was your communication with your partner (rate & describe)

70. Did you receive help/support from *any other areas* (rate & describe)

---

*5. Defusing/Debriefing*

80. I would finally like to discuss with you *your impressions of the critical incident stress management response* that followed the CI, particularly the defusing and debriefing sessions. I'd like you to begin by telling me briefly about any organisational support/assistance you received in relation to your work experience with the Port Arthur incident.

* If participant was not defused go to Q.93

and, if participant was not involved in a group debrief go to Q.113

and, if participant was not involved in individual debriefing/counselling go to Q.115

81. Could you now briefly describe the defusing you were involved in (particularly any aspects that were important to you)

**Defusing**

82. How *valuable* overall was the defusing session **(Rating 13)**

83. Describe the level of *effective communication* in the defusing session **(Rating 14)**

84. Describe the level of *warmth and support* in the group

85. Describe the level of *group unity*. How close was the group.

86. How much did you *attempt to influence* others in the group

87. How much were you *influenced* by others in the group

88. How *safe* did you feel to *disclose* your thoughts and feelings

89. *Did* you disclose your thoughts and feelings (Y/N)

90. Was there a change in group *attitudes or emotions* due to the defusing?

91. Can you rate the person who ran the defuse on their.... **(Rating 15)**

a. Effort to understand

b. Level of commitment

c. Ability to understand people's thoughts & feelings

d. Ability to communicate to the group

e. Level of genuineness

f. How well you could relate to them

92. What is your *personal evaluation of defusing*/process, including your likes / dislikes of the process, and any suggested improvements you may have.

* If participant received no group debriefing go to Q. 113

and if participant received no individual counselling/debriefing go to Q 115

**Group Debrief**

93. Could you now briefly describe any group debriefing sess'on(s) you were involved in (particularly any aspects that were important to you)

94. Did you wish to participate in the debrief (Y/N)

95. Describe the debriefing session process as it occurred, as best as you can remember it.

96. How well was the process explained to you.

97. Describe the make-up of the group who were being debriefed.(Describe the number, where they were from, and how well you could relate to them)

98. Were there any co-workers that you or the group didn't want to be there (Y/N)

99. Describe the level of *effective communication* in debriefing sessions **(Rating 16)**

100. Describe the level of *warmth and support* in the group

101. Describe the level of *group unity* How close was the group

102. How much did you *attempt to influence others* in the group

103. How much were you *influenced by others* in the group

104. How safe did you feel to *disclose* your thoughts and feelings

105. *Did you* disclose your thoughts and feelings

106. Was there a change in *group attitudes or emotions* due to the debriefing?

107. Could you give me your impressions of the person who ran the debriefer.

Rate the Leader on their **(Rating 17)**

a. Effort to *understand*

b. Level of *commitment*

c. Ability to *understand* people's thoughts & feelings

d. Ability to *communicate* to the group

e. Level of *genuineness*

f. How well you could *relate* to them

108. How *valuable* was the debriefing for *you* **(Rating 18)**

109. How *valuable* was the debriefing for the *group*

110. How did the debrief *help you*, what changes occurred as a result

111. Did you have any *expectations* about the debriefing that weren't met

112. Do you have any *suggested improvements* for debriefing process (timing, process, debriefers etc)

* If participant received no individual debriefing/counselling go to Q. 115

**Individual Debriefs**

113. Could you now *briefly describe* any *individual debriefing* session(s) you were involved in (particularly any aspects that were important to you)

114. How *valuable* was the debriefing for you **(Rating 19)**

115. Are there any *other comments* you would like to make about the Port Arthur incident or the defusing and debriefing processes that followed

# Appendix B

## Tasmanian Emergency Services CISM Team

Tasmanian Emergency Services

Critical Incident Stress Management Program

# BACKGROUND & HISTORY

Prepared by
Matthew Richman
Team Co-ordinator
January 1996

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Annexure "J" - Original Team Structure

Annexure "K" - Current Team Structure

Attachment - 1994/95 Annual Report

# 1. Introduction

1.1. The information contained in this report has been obtained through research conducted into the Tasmanian Emergency Services Critical Incident Stress Debriefing Team.

The information was obtained from minutes of meetings, correspondence, annual reports and consultations with existing Team members and members of the Management Co-ordinating Committee.

It has been prepared to provide a background to the establishment of a critical incident stress debriefing service for Tasmanian emergency service personnel and also gives an insight into the history and development of the Team.

It should be noted that the emphasis in the report is towards the establishment of the service within the Tasmania Police Force.

Matthew Richman
**Team Co-ordinator**

January 1996.

## 2. Background

2.1. In 1984 a conference was held at the Repatriation Hospital, Hobart. The conference was run by Dr Robyn Robinson (Victoria) and dealt with stress related issues. The conference was attended by approximately thirty persons including two or three police officers.

2.2. As a result of the conference a (then) Tasmanian Ambulance Service Officer, Mr Gerard Lawler, developed an interest in the area of critical incident stress and how to manage it within the Tasmanian emergency services.

2.3. In 1985 (or early 1986), Professor Jeffrey Mitchell (USA) visited Tasmania and delivered a lecture on critical incident stress debriefing. As a direct result of the interest that was generated out of this lecture, Gerard Lawler arranged for Dr Robyn Robinson (Victoria) to visit Tasmania and present a two day seminar which was to focus on the nature of stress and coping strategies in the emergency services. This seminar was held in November 1987 and was attended by approximately twenty emergency service personnel from Tasmania Police, Tasmania Fire Service, and the Tasmanian Ambulance Service.

2.4. A specific proposal for the establishment of a critical incident stress debriefing service was later formulated by Ambulance Officers Gerard Lawler and Geoff Mulvaney. The proposal attracted considerable interest from the administrative heads of Tasmania Police, the Tasmania Fire Service and the Tasmanian Ambulance Service.

2.5. Tasmania's then Commissioner of Police, Mr Bill Horman, (who was head of the Department of Police and Emergency Services - encompassing Tasmania Police, the State Emergency Service, the Tasmania Fire Service, and the Tasmanian Ambulance Service) was instrumental in the establishment of the critical incident stress debriefing program. He had been involved with a similar service in Victoria prior to his appointment to Tasmania Police.

## 3. History

**3.1.** At 3.00 p.m. on Tuesday the 26th of July 1988, a meeting of officials was held to discuss the setting up of a critical incident stress debriefing process in Tasmania. This was the first meeting of what is now the Management Co-ordinating Committee although it was previously known as the Co-ordinating Committee or Steering Committee.

**3.2.** In 1988, Tasmanian Emergency Service Personnel attended a conference in Melbourne, Victoria, from the 26th - 28th of August. The conference was titled "Dealing with Stress and Trauma in Emergency Services: an international conference". Members of Tasmania Police, the Tasmania Fire Service, and the Tasmanian Ambulance Service attended.

**3.3.** On the 4th of October 1988, approximately fifty - sixty persons attended a briefing session which was conducted at the Teachers Federation Building in Patrick Street, Hobart. The briefing was conducted by Gerard Lawler, Dr Robyn Robinson, a Psychologist with the Social Biology Resources Centre, Victoria, and Sue McNulty, a psychologist with Victoria Police. It was aimed at assessing the feasibility of establishing a Team and at gaining the support of emergency service personnel.

**3.4.** Further to this, a two day information seminar was held at the Tasmania Police Academy on the 5th and 6th of October 1988. The seminar provided detailed information on the nature of stress suffered by emergency service personnel, the system that existed in Victoria to deal with this type of stress, and the processes involved in setting up such a system. The seminar was conducted by Dr Robyn Robinson and Sue McNulty. The seminar was attended by selected emergency service personnel, mental health professionals and clergy.

**3.5.** The seminar generated great interest and two groups were formed from the attendees. The first group, the Executive, were involved with the establishment and delivery of the program and the second group, the resource group, were interested in offering their support in establishing the service and in disseminating information about the program to their colleagues. These groups were in addition to the Management Co-ordinating Committee.

**3.6.** Administrative support for the program was provided by the State Emergency Service whose then Deputy Director (now Director) Mr Joe Paul had been appointed as Chairman of the Co-ordinating Committee.

3.7. Psychologists from the Vietnam Veterans Counselling Service, Dr Graham Perkin and Joan Montgomery, were appointed to the positions of Clinical Director and Deputy Clinical Director. Gerard Lawler was appointed to the position of Team Co-ordinator. All positions were voluntary, unpaid, and over and above core role functions.

3.8. Applications for membership of the Team were called for and, following an assessment of suitability, a total of twenty three persons - including approximately eighteen peers (emergency service personnel from Tasmania Police, the Tasmania Fire Service and the Tasmanian Ambulance Service) were selected as Team Members and underwent initial training in critical incident stress debriefing at the Tasmania Police Academy on the 20th and 21st of June 1989. The training was conducted by Dr Robinson and was based on Professor Mitchell's internationally accepted model.

3.9. Briefing sessions of executive and senior officers (from sergeant and comparable ranks upwards) were held regionally. These sessions were conducted by Gerard Lawler, Dr Graham Perkin, and Dr Robyn Robinson and were held at:

| | | |
|---|---|---|
| *Hobart*<br>*SES Headquarters* | *Thursday*<br>*22 June 1989* | *9.30 a.m. - 11.30 a.m.* |
| *Launceston*<br>*SES Headquarters* | *Thursday*<br>*22 June 1989* | *2.30 p.m. - 4.30 p.m.* |
| *Burnie*<br>*SES Headquarters* | *Friday*<br>*23 June 1989* | *8.45 a.m. - 10.45 a.m.* |

3.10. The briefing sessions were well attended and well received.

3.11. The first twelve months were essentially a planning and development period and the Team did not commence formal operations until November 1989. During this formative stage, there was considerable emphasis on the establishment of protocols and procedures. A copy of the original protocols and procedures is attached at Annexure "A".

## 4. Advertising of Service

**4.1.** Aside from the briefing sessions outlined above, the existence of the service was advertised across the State in several different ways.

**4.1.1. Newsletters:**

4.1.1a On the 10th of November 1988, a newsletter was produced and distributed to all emergency service personnel. The newsletter was included with the pay sheets of all permanent employees and distributed to all stations. The newsletter defined what a critical incident is, outlined the purpose of critical incident stress debriefing, commented on the confidentiality aspect, and outlined "where are we now and where are we heading". Additionally it described the Critical Incident Stress Debriefing Team, outlined the establishment of the Tasmanian Team and listed the recommendations of the workshop that was held at the Police Academy on the 5th and 6th of October 1988. Names of personnel attending the workshop were also listed and those considered suitable were nominated as potential contact points should the recipient require any further information. A copy of the newsletter is attached (Annexure "B").

4.1.1b The second newsletter was distributed in December 1988. It outlined "Where are we now?" and provided an introduction to the Clinical Director, Deputy Clinical Director, and Team Co-ordinator. It also reiterated the basis for the Teams existence and gave a further assurance of confidentiality. A copy of this newsletter is also attached (Annexure "C").

4.1.1c A third newsletter was distributed in May 1989. The newsletter indicated that debriefings had commenced and also looked at "Where to now?". The contact number for the service was also included in this newsletter along with advice that personnel would be contacted in the hour following their call A copy of the newsletter is attached (Annexure "D").

4.1.1d A fourth newsletter was distributed in February 1990. This newsletter outlined critical incident stress, why debriefing is required and the sorts of incidents which may be considered to be "critical". It also described what happens at a debriefing and had a separate section entitled "CISD Call Out". This section outlined the call-out procedure and again listed the call out telephone number (002) 343135. It also discussed who the CISD Team was and its reason for existing. This newsletter is also attached (Annexure "E").

### 4.1.2 Posters and Pamphlets

4.1.2a Posters advertising the existence of the CISD Team and the call-out number were produced and distributed to all Police Stations around April 1990. Distribution of the posters was co-ordinated by the regional liaison officers.

4.1.2b The original posters were light blue and featured photographs arranged symmetrically. A pamphlet was also distributed at this time. The second run of posters were again light blue but the photos were randomly placed. The current issue posters are blue, red and white. Pamphlets were also produced to complement these posters and were distributed widely in education sessions, individually, and occasionally following some debriefs. A current pamphlet is attached (Annexure "F").

### 4.1.3 Police Gazette Notices

4.1.3a The existence of the CISD Team was advertised in the Police Gazette on two occasions. Other references as to the existence of the Team were also made with the publication of training dates, the duties of the Occupational Health and Safety Co-ordinator etc.

4.1.3b ***22 August 1991, Notice No. 145 (page 67)***

*"Policy Regarding Involvement in Critical Incident Stress Debriefings for the Tasmania Police Force".*

A copy of the Gazette notice is attached at Annexure "G".

4.1.3c ***27 May 1993, Notice No. 107 (page 45)***

*"Tasmania Police Policy Document No. 06/93*
*Critical Incident Stress Debriefing Policy for Tasmanian Emergency Response Organisations".*

The Notice advised members that the policy was being distributed to District Superintendents. A copy of the Gazette notice is attached Annexure "H".

### 4.1.4 Policy Document

At the twenty-second meeting of the Management Co-ordinating Committee on the 15th of March 1993, the four agencies signed a common policy document. The document was subsequently distributed amongst the agencies. A copy of the policy document, No 06/93 is attached at Annexure "I".

## 5. Accessibility

5.1. Access to the service was readily obtainable through the 24 hour contact number mentioned previously. The provision of a 24 hour contact number was initially discussed at the seventh Management Co-ordinating Committee meeting which was held on Friday the 2nd of September 1988. This service was well and truly in place by the eleventh meeting of the Management Co-ordinating Committee which was held on Monday the 30th of April 1990.

5.2. With the first run of posters, contact numbers of individual peers were distributed for display on station notice boards. This was not repeated as the contact list dated very quickly with transfers etc. Peers became well known within their agencies and regions and were often a first point of contact for individuals, supervisors and managers.

## 6. Education

6.1. Education of emergency service personnel was identified early on as an important issue. To this end, an education package was developed in April 1990 by officers from the Tasmania Fire Service - predominantly Graeme Newbury. The education package was being utilised from (approximately) the middle of the same year.

6.2. Education sessions involving police officers, occurred from 1990. Team members regularly attended the Police Academy and delivered education sessions to development courses, recruit courses and many in-service courses. Education sessions also occurred in the workplace although these were on an ad hoc basis. Within Tasmania Police education sessions occurred, at a station level, from 1992 as part of the Occupational Health and Safety Officers presentations on infectious disease controls.

## 7. Funding

**7.1.** Funding for the program was initially obtained through the Department of Police and Emergency Services. With the disbanding of the Department contributions were sought, aside from an appropriation of $18,000, from agencies on a percentage basis.

**7.2.** The budget for the program has been around $32000 for a number of years (although there have been marginal increases). Funding for the current financial year has been increased to $53,650.

**7.3.** Expenditure is basically confined to operational costs, such as communications and psychologists fees, and training.

## 8. Team Structure

**8.1.** The structure of the Team has altered quite significantly over the years. The major changes have occurred recently and resulted from a review into the structure and operations of the Team which was conducted by Dr Robyn Robinson. The original Team structure is attached at Annexure "J".

**8.2.** The Team structure, as at the 30th June 1995, is attached at Annexure "K".

**8.3.** The Management Co-ordinating Committee is made up of representatives of heads of agencies, union/association representatives, the clinical consultant, the Team Co-ordinator and a Team representative.

**8.4. Positions on the Management Co-ordinating Committee**

| | |
|---|---|
| *Chairman* | *Director, State Emergency Service* |
| *Deputy Chairman* | *Representative of the Commissioner of Police, Tasmania Police Force* |
| | *Representative of the Director, State Emergency Service* |
| | *Representative of the Director, Tasmanian Ambulance Service* |
| | *Representative of the Chief Officer, Tasmania Fire Service* |

*Representative of the*
*Tasmania Police Association*

*Representative of the*
*United Fire-fighters Union*

*Representative of the*
*Ambulance Employees Association*

*Clinical Consultant*

*Team Representative*

*Team Co-ordinator*

**8.5.** The Operations Committee has six members. They are the;

1. *Clinical Consultant*
2. *Psychologist Representative*
3. *Liaison Officer - North Western Region*
4. *Liaison Officer - Southern Region*
5. *Liaison Officer - Northern Region*
6. *Team Co-ordinator*

The Operations Committee addresses training, education and general Team matters.

**8.6.** The Team proper is made up of emergency service workers (peers) and mental health professionals (psychologists). The positions of Regional Liaison Officers and Assistant Liaison Officers are filled annually by nominations from within the Team.

## 9. Team Membership

**9.1.** Emergency service personnel who join the Team are primarily motivated by a desire to enhance the well-being of fellow emergency service workers following their exposure to a critical incident. Membership of the Team demands a high level of commitment and dedication - often within the peers own time.

**9.2.** Membership of the Team is attained by interested persons submitting an application form (listing referees), completing a formal interview and, if successful, being appointed to the Team and then being trained in the Mitchell Model.

9.3. Up until recently, the peers contribution to the Team (in terms of hours) was over and above their core role, voluntary and unpaid. Peers are now able to claim time off in lieu.

9.4. Psychologists are appointed to the Team in the same manner and undergo the same training as the peers. They are drawn from the public and private sector and have a similar motivation to peers. They are paid an hourly rate for travelling and also for the conducting of any defuse, debrief or follow-up. Initially the psychologists time and expertise were free of charge although this altered due to the heavy commitment required.

9.5. Historically, the positions of Team Co-ordinator, Deputy Team Co-ordinator, Liaison Officer, Assistant Liaison Officer etc. were filled by peers who undertook these functions over and above their core (i.e. policing) role and their peer role. Again these positions were voluntary and unpaid.

9.6. The Clinical Director and Deputy Clinical Director positions were filled by psychologists and entailed a heavier (time) commitment to the program

9.7. Team numbers have increased over the years and, as at the 30th of June 1995, the Team consisted of;

| CISD Region: | Police | Fire | Ambulance | SES | Sub-Total | Psychologists | Total |
|---|---|---|---|---|---|---|---|
| **Southern** | 7 | 5 | 4 | 1 | 17 | 8 | 25 |
| **Northern** | 7 | 3 | 3 | 0 | 13 | 2 | 15 |
| **North Western** | 6 | 3 | 3 | 1 | 13 | 2 | 15 |
| **Total** | 20 | 11 | 10 | 2 | 43 | 12 | 55 |

9.8. Team numbers currently stand at what is considered a minimum establishment level.

## 10. Clinical Consultant and Team Co-ordinator

**10.1.** As mentioned previously, the position of Clinical Director (retitled Clinical Consultant) involved a heavier commitment to the program. Essentially the role of the Clinical Director is to oversee the program from a clinical perspective. The decision to hold a debrief rests with this person. As a result, the Clinical Director must be available 24hrs a day - an onerous responsibility for a voluntary position.

**10.2.** The position was filled in a voluntary capacity until Mr Simon Webb was appointed as the first police psychologist for Tasmania on the 13th of August 1992. The CISD Team was instrumental in creating the position of Police Psychologist. The position description encompassed the position of Clinical Director for the CISD Team.

**10.3.** The Team Co-ordinator is, essentially, responsible for the day to day management of the program. Apart from the initial establishment period, the position of Team Co-ordinator was over and above the core role of the persons filling the position.

**10.4.** This changed when, on the 16th of March 1992, Tasmania Police appointed an officer, 1/C Constable L. D. ADAMS No. 1600 to the position of Occupational Health and Safety Co-ordinator. The appointment was advertised in the Police Gazette on the 14th of May 1992 (Notice No. 102). Whilst initially an assistant Team Co-ordinator, the position of full-time Team Co-ordinator became part of the Occupational Health and Safety Co-ordinators duties from July 1992.

**10.5.** In late 1994 the part-time positions of Team Co-ordinator and Clinical Director were divorced from the positions of Police Occupational Health and Safety Co-ordinator and Police Psychologist (respectively).

**10.6.** The position of Team Co-ordinator is now full-time and is to be shared amongst the Tasmania Police, Tasmania Fire Service and Tasmania Ambulance Service on a rotational basis with the State Emergency Service covering periods of leave. Appointment to the position is on a twelve month basis although the present incumbent (a police officer) has been appointed for two years.

**10.7.** The position of Clinical Consultant is filled by the current Police Psychologist - although the position is in no way connected to his police role.

## 11. Team Activation's

11.1. Despite the original intention of the (then) Clinical Director, Dr Graham Perkin, not to utilise the Team during the planning and development period, the Team completed some twenty debriefs prior to it becoming fully operational in November 1989. These activation's occurred due to the occurrence of a number of significant incidents.

11.2. Since then the Team has been activated regularly. An indication of the usage of the Team is provided below.

| Period | Defuses | Debriefs |
|---|---|---|
| 01.11.1989 - 31.12.1990 | Not recorded | 32 |
| 01.01.1991 - 30.06.1992 | 4 (from 24.04.1992) | 28 |
| 01.07.1992 - 30.06.1993 | 11 | 19 |
| 01.07.1993 - 30.06.1994 | 30 | 51 |
| 01.07.1994 - 30.06.1995 | 42 | 52 |

11.3. It should be noted that, definitionally, a debrief involves three or more persons. Many of the "debriefs" listed above involved less than three persons and are therefore not, strictly speaking, debriefs. Nevertheless, these are in integral part of the service that is provided and are included in the figures to demonstrate the flexibility of the service.

11.4. It should also be noted that these figures do not take into account the number of emergency service personnel that were contacted and/or followed-up following the occurrence of a critical incident - another important part of the service that is provided (for an example of the numbers contacted refer to page 5 of the attached 1994/1995 Annual Report).

## 12. Training and Conferences

12.1. Since inception, Team members have undergone regular training sessions. The Team trains four times per annum (three single days and one two day). The trainings aim to enhance members skill level and consist of a review of performances, mini-skills training etc.

12.2. Additionally, Team members regularly attended national conferences held by the Australasian Critical Incident Stress Association (ACISA). These conferences enable Team members, and the Team itself, to keep up with any changes in critical incident stress management. Some members of the Team are also members of ACISA.

## 13. Team Reports and Confidentiality

**13.1.** The provision of a CISD service that could guarantee confidentially was considered vital to the success of the program. This was due to an apparent inherent distrust of any form of counselling services which appeared to be management driven. The fact that confidentiality was, and could be seen to be, guaranteed is considered to be instrumental in the success of the program.

**13.2.** Accordingly, Team reports were limited and names of any and all persons contacted by the CISD Team were not recorded. Over the years reporting conditions were implemented. The reports were "in confidence" and maintained by the Team Co-ordinator and the Clinical Director. Initially Team Activity Reports were developed which were to be submitted by Team members following a debriefing session. This was gradually extended and now activity reports are required for defuses, debriefs and follow-ups. Evaluation forms are distributed to personnel involved in debriefs with the request that they be completed and returned. They are also confidential. Returns from peers stating the hours committed to CISD were also introduced. Initially these were on a monthly basis although they are now on an incident by incident basis.

**13.3.** At the twenty-first meeting of the Management Co-ordinating Committee which was held on the 24th of November 1992, Mr Simon Webb (the then Clinical Director) commented on the Australasian Critical Incident Stress Association Conference which he and fourteen other Team members had attended in Sydney. It was noted that the New South Wales Police Clinical Director recorded the names of all persons attending debriefs and those not attending.

**13.4.** The twenty-second meeting of the Management Co-ordinating Committee, which was conducted on the 15th of March 1993, again discussed the issue of the recording of names. It was resolved that the recording of the names of personnel attending debriefs was not appropriate as it may discourage the attendance of personnel who currently are ensured of the confidentiality of the debrief. It was further resolved that the appropriate action was to record the names of all personnel contacted regarding a debriefing being conducted. Whether or not they attended the debrief would not be recorded but the fact that the offer was made was to be recorded. This system was introduced in early May 1993.

## 14. Services Provided

**14.1.** The Team provides a wide range of services and these are listed below.

***Contacting Emergency Service Personnel who have been involved in a critical incident***

***On scene support***

- *a Team member can be present to provide immediate assistance.*

***Defuses***

- *are less structured than a debrief and occur immediately after the conclusion of an incident*
- *allows for an initial ventilation of feelings*

***Debriefs***

- *are undertaken within one - seven days after the conclusion of an incident*
- *is a structured group process which is not counselling or therapy*

***Follow-up***

- *the Team provides members with one follow-up session with a mental health professional. Peers offer unlimited follow-ups.*

***One on one assistance.***

- *as required by the emergency service worker*

## 15. Conclusion

**15.1.** Since inception, the Team has promoted itself as being accessible to all members of the Tasmanian Emergency Services. For example, newsletter number four (page 2) stated "All emergency service personnel have the responsibility for identifying/recognising significant events that may qualify for a debriefing". Education sessions stress that the responsibility for activating the Team lies with managers, supervisors, colleagues and individuals themselves. The 24 hour contact number and the availability of peers in each region provide clear evidence of the accessibility of assistance.

**15.2.** Over the years the Tasmanian Emergency Services Critical Incident Stress Debriefing Team has undergone significant changes. It has evolved into what is considered to be ".... one of the most successful and widely respected CISM programs in Australia". (Robinson 1994)

# Annexure "A"

# Protocols and Procedures

TASMANIA

# OFFICE OF THE DIRECTOR OF EMERGENCY SERVICES

## CRITICAL INCIDENT STRESS MANAGEMENT CO-ORDINATING COMMITTEE

## PROTOCOLS AND PROCEDURES

The Tasmanian CISD Team has been established to support the State's emergency care providers, in the interest of staff health and well being. Its purpose is to lessen the impact of "critical incidents", to minimise potential long term effects and to promote a healthy, supportive work environment.

### 1. BACKGROUND TO PSYCHOLOGICAL DEBRIEFING TEAMS

Case studies have been conducted in the United States into major incidents where numerous injuries or fatalities occurred. These studies have revealed that significant numbers of Emergency Services personnel experienced some form of stress related symptoms following the incident. Many of these symptoms were transitory and most personnel had no long term detrimental effects. nevertheless a small percentage of personnel experienced continuing, long term detrimental effects resulting from exposure to an incident. Some of these effects were delayed, surfacing after a period of no apparent symptoms. Without professional intervention, these personnel experienced declining work performance, deterioration of family relationships and increased health problems.

The objective of a psychological debriefing is to provide professional intervention (immediately) after major incidents to minimise stress related injury to Emergency Services personnel.

### 2. MAJOR STRESSORS FOR EMERGENCY SERVICE PERSONNEL

"Critical Incident Stress"

Professor Jeffrey Mitchell has defined critical incident stress as 'any situation faced by Emergency Service personnel that causes them to experience unusually strong emotional reactions which have the potential to interfere with their ability to function either at the scene or later'.

[1]Mitchell, J. When Disaster Strikes, JEMS, January 1983, pp36-39.

The major stressor for Emergency Services personnel include:

* Death or serious injury of a fellow colleague in the line of duty.
* Suicide of a fellow officer.
* Multiple casualty incidents.
* Death or serious injury of children.
* Attending scenes where a victim is known to staff, or reminds staff of a known/loved one.
* Situations that threaten the life or safety of staff.
* Situations that entail prolonged rescue work.
* Situations that attract undue and/or critical media attention.
* Situations that place heavy and immediate responsibility on staff for the saving of lives.
* Dealing with body parts.
* Responding to a high number of difficult situations in a short space of time.
* Any incident in which the circumstances are so unusual or the sights and sounds so distressing as to produce a high level of immediate or delayed emotional reaction.

Any one or a combination of the above may precipitate the need for a critical incident stress debriefing. It also needs to be remembered that events which cause stress to one individual may be non-stressful to another.

3. PURPOSES OF PSYCHOLOGICAL DEBRIEFING AND THE CISD TEAM

Critical incident stress is a psychological and educational group process designed to:

. Lessen the impact of a critical incident.

. Facilitate recovery in people who are experiencing normal reactions to totally abnormal events.

. Prevent the development or persistence of unresolved problems.

4. INITIATING A CISD

All critical incidents with the potential to affect staff or having affected staff should first be bought to the attention of the officer in charge who will liaise/consult with a peer debriefer within that agency or in their absence, contact the Team Co-ordinator.

If after consultation and assessment, the peer support member considers a CISD should occur or wishes to further consult, the Team Co-ordinator will be contacted. This initial contact should be made as early as is practical during (if applicable) eg. prolonged difficult situation, or soon after such incidents occur.

When a peer support member has been involved in the incident requiring a CISD, the peer debriefer may be replaced by another peer debriefer from another Service/region.

A CISD is seen by all Emergency Services as a positive, preventative action which assists staff and the Service. Any requests for, and any actual debriefings, should be encouraged and supported by staff at all levels.

## 5. HOW A CISD IS ACTIVATED

All Emergency Services personnel have the responsibility for identifying/recognising significant events that may qualify for a debriefing.

When an incident is identified as a "critical incident" in the absence of "peer support members" within your region/Service, any officer may contact the Team Co-ordinator for a request.

1. To request a debriefing phone Tasmanian Ambulance Service, Southern Region (002) 343135. Ask for the CISD service. This service operates 24 hours a day.

2. Leave your name and a phone number where you can be reached in the upcoming one (1) hour to provide any further information.

3. The Ambulance Service control room will contact and notify the Team Co-ordinator/Clinical Director.

4. The Clinical Director/Team Co-ordinator contacts the person/agency requesting the debriefing so as to:

   a. Determine details of the nature of the incident;

   b. Assess the best course of action eg. formal debriefing, assistance with peer support members or referral.

5. If a formal debriefing is indicated, the Team Co-ordinator will arrange the time and place for the debriefing session and notify relevant parties.

## 6. CONSIDERATIONS IN ARRANGING DEBRIEFINGS

### 1. Location of Debriefing

Debriefings may be conducted anywhere that provides ample space, privacy and freedom from distractions (eg. phone calls, radios, pagers). Selection of site will be mutually determined by CISD staff and Emergency Services personnel.

2. Eligibility to Attend Debriefing

All Emergency Services personnel involved in the incident will be required to attend. This includes Police, Fire, Ambulance and State Emergency Service staff. Attendance will be mandatory, however participation in the debriefing is not mandatory.

NO REPORTERS (EG. MEDIA PERSONNEL OR OBSERVERS) WILL BE ALLOWED IN THE DEBRIEFING.

3. Relief from Duty to Attend Debriefing

Agency management and command officers will relieve personnel from duty for debriefings.

## 7. TYPES OF PSYCHOLOGICAL DEBRIEFING

A critical incident stress debriefing provides a safe environment in which personnel can discuss their feelings and reactions and thus reduce any stress resulting from exposure to critical incidents. It is not a critique of Emergency Services operations at the incident and performance issues will NOT be discussed. All debriefings will be STRICTLY CONFIDENTIAL.

Several types of debriefings may be conducted, depending upon the circumstances of a particular incident. The following five types of debriefings, singularly and in combination, are most commonly utilised:

* On Scene or Near Scene

  Only initiated for prolonged incidents with a potential to affect staff. The CISD Team is available for consultation.

* Initial Informal Debriefing

  This is held within a few hours of the incident. The leader is a peer debriefer. Participants talk about their own feelings and reactions to the incident. The atmosphere should be positive, supportive and caring. No-one should be criticised. Time period, usually one hour.

* Formal Debriefing

  Occurs between 24 to 72 hours after the incident. The leader must be a mental health professional with knowledge of Emergency Service operations and critical incident stress.
  Entails non-evaluative discussion of involvement, thoughts and feelings resulting from the incident, discussion of possible stress related symptoms, education about stress, critical incidents and coping skills. This debriefing has a specific format.

* Follow Up Debriefing

This may occur weeks or months after the incident. The main purpose is to resolve issues or problems that are still present. It may be performed with the entire group or a portion of it. Major critical incident situations (eg. disaster) may usually involve one or more follow up debriefing sessions.

## 8. POLICY RELATING TO FORMAL DEBRIEFING

1. Confidentiality

Complete confidentiality will be maintained by all present at the debriefing. There will be no reporting about individuals to management or any other bodies by the CISD Team.

Information will be released only under the following circumstances:

* If a member of the CISD Team determines that there is a clear and imminent threat to the life of a person;

* If exacted by legal sources.

2. Compensating claims, disability, fitness for work assessments

Mental health professionals in CISD Teams will not give opinions on compensation claims, disability or fitness for work for members present at a debriefing session.

## 9. THE DEBRIEFING TEAM

The team will consist of one or two mental health professionals (who will function as team leader and team co-leader) and one or two peer support staff. The number of team members will depend upon the number of participants expected at the debriefing. Team members will carry identification.

Team members undergo a rigourous selection and training process. Selection of applicants follows an initial 2 day training program. Team members must thereafter attend regular educational update meetings. Contracts are renewed on an annual basis. A high standard of training and maintenance of standards is held to be central to the program.

## 10. NON-SANCTIONED DEBRIEFINGS

It is understood by all team members that, at no time, will any team member attempt to provide a debriefing without adhering to all sections of this protocol. When a debriefing is requested, the Clinical Director will be notified and all requirements set forth in this protocol will be met. Any requests for a debriefing outside of these regulations will not be honoured.

## FORMAT FOR FORMAL CRITICAL INCIDENT STRESS DEBRIEFINGS

### Introductory Phase

The team leader sets the ground rules for the session. The debriefing process is described. The need for absolute confidentiality is explained and emphasised.

The following points need to be made:

1. Strict confidentiality shall be maintained. All information regarding agencies involved, situation debriefed and issued discussed shall not be divulged after a debriefing except with team members or as part of the team continuing process.

2. No mechanical recordings or written notes will be made during a debriefing. It is up to the team to enforce this during the debriefing.

3. No media personnel (TV, radio or newspapers etc.) will be allowed to film or report on a debriefing. In the event that these individuals are present without team knowledge, phrases such as 'everything said here is off the record' may be helpful. This does not guarantee however, that information will not be reported.

   Only the Team Co-ordinator may speak to the media, to educate about the process of CISD and to discuss the effects of stress. All other inquiries are to be referred to the Clinical Director.

4. Debriefings are not a critique of the incident. The team has no evaluation function of tactical procedures. The debriefing process provides a format in which personnel can discuss their feelings and reactions and thus reduce the stress resulting from exposure to critical incidents. The goal of the CISD is to encourage ventilation of emotions and a rebalancing of the individual and the group.

5. While individuals will be requested to answer one or two initial questions (eg. their name and role at the scene), thereafter verbal participation will be voluntary.

### Fact Phase

This establishes the scene. Members are asked to state who they are, what their functions were at the scene and what happened out there; thus factual information is obtained about the individuals present and their role at the scene. Everybody should speak at this time.

### Thought Phase*

Members are asked to state their first thought when they arrived on the scene. This leads into the Reaction Phase.

### Reaction Phase*

Individuals describe how they first reacted, and identify what was the worst thing about the scene for them. This now moves the group into exploration of feelings. Fears, anxieties, concerns, guilt, frustrations, anger and ambivalences are discussed.

Symptom Phase

This part concerns itself with identifying symptoms experienced at the scene, some time afterwards and currently. Thus members identify their own stress response and they are also asked to talk about what is going on in their home life and at work. It enables an assessment by the team leader of how individuals currently are coping.

The Teaching Phase

The leader teaches the group about the stress response syndrome, 'normal' signs and symptoms following critical incidents and ways of coping with stress response. This is a crucial component of the debriefing procedure which aims to enable individuals to reframe their experience in a way that will enhance well being and reduce symptoms of stress.

The Re-entry Phase

The final phase aims to wrap up loose ends; to answer outstanding questions, provide final reassurances and make any plans to follow up by way of either referral or group debriefing. Every individual leaves with a telephone contact point to a counsellor.

* Professor Mitchell's earlier writings described the thought and reaction phases collectively as the feeling phase.

## ACKNOWLEDGEMENT OF THE WORK OF DR ROBYN ROBINSON, PROFESSOR JEFFREY MITCHELL AND THEIR COLLEAGUES

The protocols and staff training program adopted by the Tasmanian CISD Team Committee have been heavily influenced by an attempt to be consistent with those developed by Professor Jeffrey Mitchell, USA, Dr Robyn Robinson, Social Biology Resource Centre, Melbourne, and their colleagues. While the Tasmanian CISD Team takes responsibility for its protocols, we wish to acknowledge the generous contributions by Dr Robinson and Professor Mitchell in sharing their protocols for the Tasmanian Team to base ours on.

### Dr Robyn Robinson

Dr Robinson is Deputy Director of the Social Biology Resources Centre, Melbourne. In 1984 she undertook a comprehensive study which assessed health and stress in the Ambulance Services of Victoria.

Dr Robinson has educated extensively throughout Australia on critical incident stress, developed a crisis counselling service for Victoria Ambulance Officers and their partners and has established the debriefing team for Victoria.

### Professor Jeffrey T. Mitchell

Professor Mitchell is Assistant Professor at the University of Maryland, USA. He is regarded as an international pioneer and a world authority on stress in Emergency Services, particularly on educational and counselling procedures designed to assist staff who respond to accident, trauma and disaster. He has developed a "debriefing" procedure which has been adopted in many countries of the world. He is actively involved in assisting people to establish CISD teams and in training team members. Professor Mitchell is the author of numerous journal articles and books (including "Emergency Response to Crisis", Prentice-Hall 1981) and the award winning audio video tapes "Critical Incident Stress and Disaster Psychology". Professor Mitchell was brought to Australia in 1986 by the Social Biology Resources Centre to be keynote speaker at the first international conference on "Dealing with Stress and Trauma in Emergency Services".

Finally, avoid using the CISD Team as a tool of management. It is not designed as a promotional route or disciplinary tool.

A CISD Team should transcend all boundaries.

A CISD Team has only one major objective: the restoration of normal job functioning to normal people who are experiencing normal reactions and normal symptoms of distress after being exposed to a highly abnormal event.

# Annexure "B"

## First Newsletter

TASMANIA

# OFFICE OF THE DIRECTOR OF EMERGENCY SERVICES

# TASMANIAN CRITICAL INCIDENT STRESS DEBRIEFING TEAM

## NEWS BULLETIN NO. 1

10 November 1988

Tasmania is currently in the process of developing a Critical Incident Stress Debriefing Team. It is anticipated that this team will have representatives from all Emergency Services and operate on a Statewide basis.

WHAT IS A CRITICAL INCIDENT?

A critical incident is any situation faced by Emergency Service personnel that causes them to experience unusually strong emotional reactions which have the potential to interfere with their ability to function either at the scene or later. A major disaster is one type of critical incident that comes to mind but a situation does not have to be of this magnitude to classify as a critical incident. The major stressors for Emergency Service personnel include:

1. Death or serious injury to a fellow colleague in the line of duty.
2. Suicide of a fellow officer.
3. Multiple casualty incidents.
4. Death or serious injury of children.
5. Attending scenes where a victim is known to staff or remind staff of a known loved one.
6. Situations that threaten the life or safety of staff.
7. Situations that entail prolonged rescue work.
8. Dealing with body parts.
9. Responding to a high number of difficult situations in a short space of time.
10. Any incident in which the circumstances are so unusual or the sights, sounds and smells so distressing as to produce a high level of immediate or delayed emotional reaction.

Any one, or a combination of the above, may precipitate the need for a Critical Incident Stress Debriefing (C.I.S.D.). It is also recognised that individuals are different. Events which cause stress to one individual may be non-stressful to another.

Box 1290N, Hobart, Tasmania 7001 Telephone (all hours): (002) 30 7000 Telex: 58188 Facsimile: (002) 34 9767

## PURPOSE OF CRITICAL INCIDENT STRESS DEBRIEFING

Critical Incident Stress Debriefing is a psychological and educational process designed to:

1. Lessen the impact of a critical incident.
2. Facilitate recovery in people who are experiencing normal reactions to totally abnormal events.
3. Prevent the development or persistence of unresolved problems.

A Critical Incident Stress Debriefing provides a safe environment in which the personnel who were involved can discuss their feelings and reactions and thus reduce any stress resulting from exposure to critical incidents. It is not a critique of Emergency Services operations at the incident and performance issues should not be discussed.

## CONFIDENTIALITY

All information discussed during a debriefing is STRICTLY CONFIDENTIAL and will not be relayed to management or discussed with those not at the debriefing.

## WHERE ARE WE NOW AND WHERE ARE WE HEADING?

Over the years there have been many incidents that have evoked strong emotional responses from Emergency Services personnel. To date there has been no mechanism in place to assist with these responses. This has left Emergency Services personnel to fend for themselves with regard to their own psychological wellbeing.

On 5-6 October 1988, Commissioner Bill Horman of the Police Department in conjunction with other heads of Emergency Services and Dr Robyn Robinson, Clinical Psychologist from Victoria and Ms Susan McNulty, Clinical Psychologist with the Victorian Police Department, held an information seminar on Critical Incident Stress Debriefing. This seminar was attended by representatives from Police, Fire and Ambulance Services as well as a number of Mental Health professionals and Industrial Chaplains. From this meeting a number of initiatives were put forward to establish a Critical Incident Stress Debriefing Team for Tasmania. These are listed in Page 4. They have been endorsed by heads of agencies and implementation is currently in progress.

## THE CRITICAL INCIDENT STRESS DEBRIEFING TEAM

The team consists of the following members:

### Clinical Director and Deputy Clinical Director

The Clinical Director is responsible for overseeing the delivery and quality of the debriefing services. These people would be from the ranks of mental health care professionals.

### Team Co-ordinator

The Team Co-ordinator's responsibility is to liaise between the Clinical Director, Peer Support Personnel and those agencies involved in a critical incident.

### Peer Support Personnel

Peer Support Personnel assist in the debriefing process and may be involved in the development and delivery of other educative programmes. Peer Support Personnel are from the ranks of Emergency Service workers and will have successfully undertaken the appropriate training programme instituted by the Clinical Director.

This team will operate with the support of the State Emergency Service which is to be responsible for administrative duties only, i.e. to provide material and support, to co-ordinate administrative meetings, and to distribute educative and training material to staff.

## THE ESTABLISHMENT OF A TEAM IN TASMANIA

To date we have in place a Clinical Director and Deputy Clinical Director (Dr Graham Perkin and Mrs Joan Montgomery from the Vietnam Veterans Counselling Service) and a Team Co-ordinator (Mr Gerard Lawler from Tasmania Ambulance Service). We are now seeking Peer Support Personnel. We invite applications for selection and training as Peer Support Personnel. Application forms may be obtained from Gerard Lawler (002) 307769 prior to Monday, 28 November 1988. If you are interested in this project and would like more information, please contact me, or alternatively contact any of the participants in the recent information seminar listed in Page 5.

RECOMMENDATIONS OF THE CRITICAL INCIDENT STRESS DEBRIEFING WORKSHOP HELD AT THE POLICE ACADEMY, ROKEBY ON 5-6 OCT. 1988

The following recommendations of the Critical Incident Stress Debriefing (C.I.S.D.) Workshop, attended by Fire, Police and Ambulance officers, were forwarded to the C.I.S.D. Co-ordinating Committee which is made up from heads of departments, union representatives and clinical psychologists.

a. That a C.I.S.D. Team for Tasmanian Emergency Services (Tasmanian Ambulance Service, Police, Tasmanian Fire Service and State Emergency Service) be established as soon as practicable. This is currently in progress.

b. That a Clinical Director of the Tasmanian C.I.S.D. Team be appointed. Dr Graeme Perkin and Mrs J. Montgomery from Vietnam Veterans Counselling Service (Clinical Psychologists) have filled these roles in a temporary capacity until 30 June 1989, when a permanent Clinical Director will be appointed.

c. That initially Mr Gerard Lawler of the Tasmanian Ambulance Service be appointed as the Tasmanian C.I.S.D. Team Co-ordinator to set up a core executive and basic team structure. Currently this is in place and progressing well.

d. That a C.I.S.D. Resource Group be formed as a core body from interested parties participating in the workshop. To date eighteen members from the initial information workshop have registered their interest. This group having attended the workshop have a good understanding of the proposed service.

e. That the State Emergency Service be the co-ordinating agency for Critical Incident Stress Debriefing requirements of the various Emergency Services. The duties would include providing administrative support and back up support for the working parties.

f. That the Tasmanian C.I.S.D. Executive will establish the Tasmanian C.I.S.D. Team appointments, training requirements and protocols.

CRITICAL INCIDENT STRESS DEBRIEFING SEMINAR - PARTICIPANTS
5-6 OCTOBER 1988

Tasmania Police

Det Sgt Paul Gray
Sgt Craig Waterhouse
Sgt Robert Cole
Sgt Albert Dix
Sgt Geoff Millhouse
Snr Sgt James Duffy
Det Sgt Michael Olsen
Sgt Hugh Wilson
Sgt Hank Timmerman

Tasmanian Ambulance Service

Chris Chapman, Ambulance Officer
Graham Jones, Duty Officer
John Richardson, State Relief Officer
Richard Byrne, Duty Officer
Gerard Lawler, Duty Officer
David Eeles, Ambulance Officer
Geoff Mulvaney, Course Co-ordinator
Peter McFarlane, Duty Officer

Tasmanian Fire Service

Peter Coppleman, Station Officer
Joe Demeyer, Senior Station Officer
Wayne Richards, Station Officer
Geoff Fletcher, District Officer
Phil Grant, Country Fire Service
Graeme Newbury, Station Officer
Peter Vandekamp, Station Officer
Peter Plummer, Country Fire Service

Inter-Church Trade and Industry Mission (Tasmania)

Rev Stan Hince
Rev Craig Ellis
Rev Stephen Tregloan

Psychologists

Dr Graham Perkin, Vietnam Veterans Counselling Service
Mrs Joan Montgomery, Vietnam Veterans Counselling Service
Dr Fred Smith, Prison Department
Dr Nils Cochrane, Mental Health Services
Mr Roger Bradshaw, Education Department

I am sure you will agree this service is long overdue for our Emergency Services. The very nature of our work brings us into direct contact with situations that at times may be abnormal or extraordinary as described on page 1 "What is a Critical Incident". It would be unrealistic to assume that such assistance would never be required, however it is reassuring to know that in the event of an incident that may affect us or our colleagues, that we soon will have in place the Critical Incident Debriefing Team to assist if required.

To date all Emergency Service administrators have been totally supportive of the C.I.S.D. concept along with the respective Emergency Service associations. It is pleasing to see both these areas working closely with each other in order to develop and monitor the program and assist in the implementation Statewide.

Critical Incident Debriefing Teams are currently available to Emergency Services in New South Wales, Victoria, the Australian Capital Territory and South Australia. From information I have received from officers, particularly in Victoria after the recent incidents in that State (Hoddle Street and Queen Street shootings) along with other incidents, the C.I.S.D. Team has been invaluable in assisting officers after the incident.

This newsletter is the first of a number as the system develops. As mentioned before, should you require any further information or wish to discuss any areas, please do not hesitate to contact any one of your colleagues that attended the seminar (names on page 5) or myself.

Gerard Lawler
TEAM CO-ORDINATOR
C.I.S.D.

# Annexure "C"

# Second Newsletter

# TASMANIAN CRITICAL INCIDENT STRESS DEBRIEFING TEAM

## NEWS BULLETIN NO. 2

December 1988

Welcome to the Tasmanian Critical Incident Stress Debriefing Team's second news bulletin.

I trust you found the first bulletin both informative and interesting in explaining what a "critical incident" is and the reason for establishing a team for our Emergency Services.

News bulletin No. 1 outlines the basis for your future C.I.S.D. Team and I would encourage you if still unsure about the concept to take a second look at this.

WHERE ARE WE NOW?

Since our first news bulletin, the response from prospective peer support personnel has been outstanding. Officers from all Services are represented. As the Christmas and New Year break is fast approaching, it will not be possible to hold interviews for selection of peer support staff until late January. However once complete, our training for these officers commences on 23 February 1989 and the Team should be operational in March of the New Year.

WHO'S WHO?

Graeme Perkin
Clinical Director

Joan Montgomery
Deputy Clinical Director

Gerard Lawler
Team Co-ordinator

Deputy Team Co-ordinator? - This position will be filled from applicants for peer support personnel by the Team Executive.

GERARD LAWLER

My career commenced with the Tasmanian Ambulance Service in 1975. Since then I have been involved in the establishment of the Ambulance Advanced Life Support Program, teaching students in a Clinical Instructor role and currently hold a Duty Officer position with the Service in Hobart. My interest in C.I.S.D. started in 1985 when Dr Robyn Robinson, the Melbourne C.I.S.D. Clinical Director, completed a study in this area for Emergency Services in Victoria. In seeing the success of the team in Victoria for Fire, Police and Ambulance officers, I have endeavoured to assist in the recognition and development of a program for our Emergency Services in Tasmania.

DR GRAEME PERKIN AND MRS JOAN MONTGOMERY

The Clinical Director and Deputy Clinical Director positions in the team are occupied by Dr Graeme Perkin and Mrs Joan Montgomery who are both counsellors with the State's Vietnam Veterans Counselling Service. Graeme completed studies in psychology in both Queensland and New South Wales before coming to Tasmania in 1973 where he has worked in hospitals until transferring to work with Vietnam Veterans in 1985.

Joan Montgomery studied psychology in Victoria and moved to Tasmania in 1968. She has worked in career and rehabilitation counselling for eight years, and in community health centres and hospital settings for six years before moving to work with veterans in 1983.

MESSAGE FROM GRAEME AND JOAN

We are particularly interested in the condition known as post-traumatic stress which occurs to varying degrees in many veterans. However it is also common in other groups of people who have suffered trauma which is outside the normal range of distressing events encountered. These include victims of traumatic accidents and major natural disasters, and unfortunately a substantial number of Emergency Service personnel whose job involves dealing with such events. It is worth noting that unlike civilians, Emergency Service personnel (and veterans) are frequently exposed to multiple critical incidents and the effects of these can be cumulative.

We have found from our work with war veterans and victims of traumatic accidents that post-traumatic stress can have extremely disabling effects. Some of these include high levels of tension, irritability, sleep disorder, disturbed relationships with others, impaired capacity to work and overall loss of a sense of wellbeing. We further note the difficulty in assisting with the disorder once it has become entrenched and long standing as in the case with veterans. In contrast, it appears that early recognition and attention is very effective in minimising the distress associated with post-traumatic stress and in preventing the development of long term problems.

For these reasons, we are most interested in being part of the development of a team to assist our Emergency Services personnel.

IN SUMMARY:

The Tasmanian C.I.S.D. Team has been established to support the State's emergency care providers in the interest of staff health and wellbeing. More specifically, to lessen the impact of critical incidents, to minimise potential long term effects and to promote a healthy, supportive work environment.

The C.I.S.D. Team assists in this process with one major objective: The restoration of normal job function to normal people who are experiencing normal reactions and normal symptoms of distress after being exposed to a highly abnormal event.

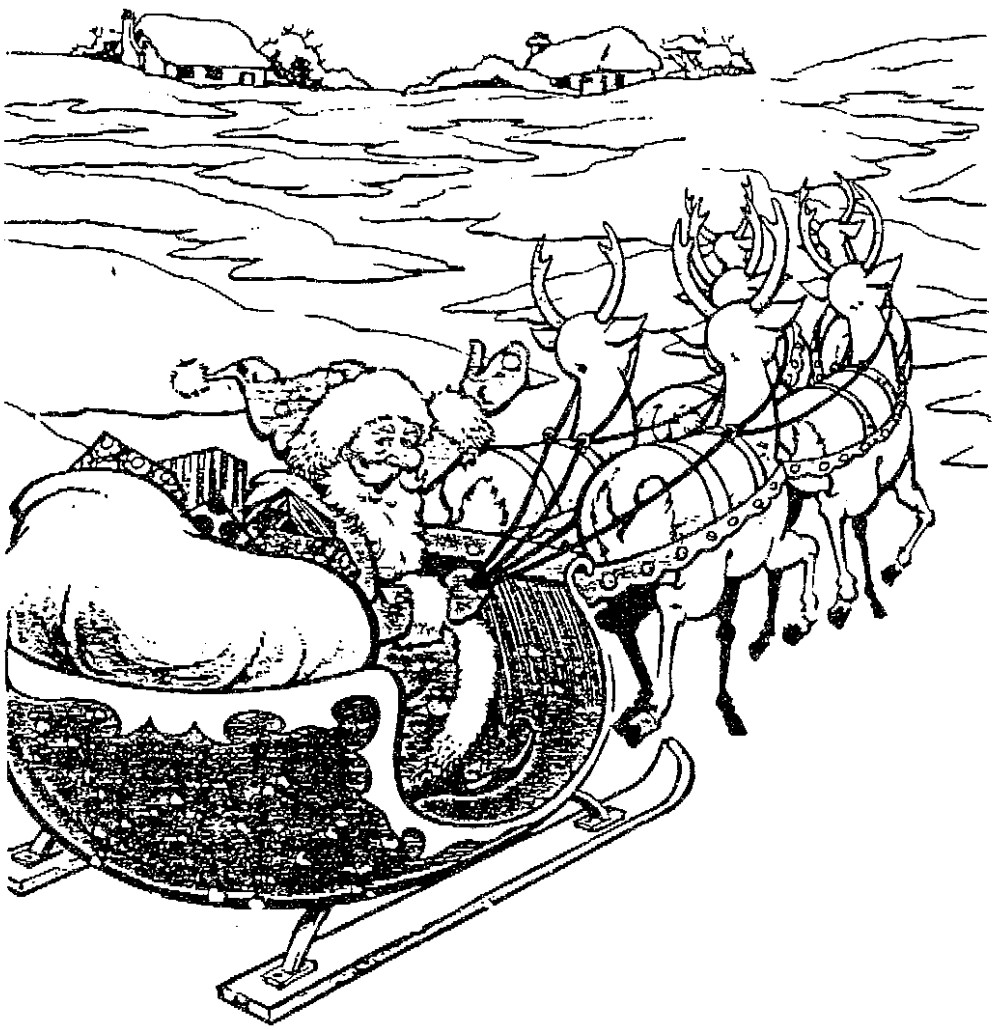
The C.I.S.D. process provides a safe environment in which personnel who were involved can discuss their feelings and reactions and thus reduce any stress resulting from exposure to critical incidents. It must be remembered that it is not a critique of Emergency Services operations at the incident and performance issues will not be discussed.

All information discussed during a debriefing is ALWAYS STRICTLY CONFIDENTIAL and will not be relayed to management or discussed with those not at the debriefing. The Team will not be used in any way as a tool of management and is not designed as a promotional route or as a disciplinary tool.

Our next news bulletin will be in the New Year once our Team has been established. Future content of the bulletins will be firstly about "the Team" and activation procedures, and from then on information on stress, the different types and education on how we can work with it in our relevant environments.

Graeme, Joan and myself take this opportunity to wish you and your families all the best for the festive season.

Gerard Lawler
C.I.S.D. TEAM CO-ORDINATOR



# Annexure "D"

# Third Newsletter

# TASMANIAN
# CRITICAL INCIDENT STRESS
# DEBRIEFING TEAM

## News Bulletin No. 3

May 1989

This is the third bulletin we have issued since the agreement of all Emergency Services to establish a Critical Incident Stress Debriefing Team for Police, Fire, Ambulance and State Emergency Service Officers.

The first and second bulletins outline the basis for your future CISD Team. I encourage you if still unsure about the concept to take a look at these.

Since the December bulletin, there have been a number of incidents around the State that staff have sought assistance with. Our original intention was to refrain from conducting debriefings until the Team had been selected and trained. However, Dr Perkin, the Clinical Director, decided to assist in these incidents given the degree of trauma involved, and the fact that the required resources were available.

WHERE TO NOW?

All prospective peer support personnel have been selected for training. Peer support personnel, as described before, make up an important part of the CISD Team. The function of these people is to assist the Clinical Director in the debriefing process, as well as general education of staff in the nature of critical incident stress and CISD. There have been around 25 peers selected from all areas of the State, and a cross section of officers from Fire, Police and Ambulance is represented.

The training for these officers will commence on 20 June 1989. We have been fortunate to secure the expertise of Dr Robyn Robinson, the Clinical Psychologist, who pioneered the first CISD program in Australia for Victoria's Emergency Services. Robyn has just attended an International Conference in the USA and no doubt will be invaluable in assisting with our training programme in Tasmania.

Immediately after the training and formal selection of peer support personnel for our Team, the Executive Committee Clinical Director Dr Graham Perkin, Deputy Clinical Director Mrs Joan Montgomery, Acting Deputy Team Co-ordinator Mr David Eeles and myself will be visiting each region to explain the programme and requirements to executive and command staff. The CISD programme has been agreed on by departments and respective associations. We have again been fortunate to have Robyn Robinson come along with us for these important information sessions. We will be reinforcing the importance of the service being available to all personnel and remaining absolutely confidential without departmental influence, along with being part of a normal process where required within Emergency Services activities.

As from Monday, 26 June 1989, the CISD Team will be officially available to all members of Emergency Services. Our news bulletins will continue, to ensure you are kept informed of any developments. Again I encourage you to review our previous bulletins if you are unsure of the structure, purpose and the manner in which the CISD process works. If you have misplaced your bulletins, copies can be obtained by phoning (002) 307550.

I wish to take this opportunity to thank the State Emergency Service for their administrative support during the past year in the development of the Team, heads of department and the Emergency Services associations. It has been pleasing to see all agencies and associations working so well to assist in the Team's development and formation.

Our next bulletin will explain more fully the call out procedure and names of peer debrief personnel after the training to commence in mid June.

The contact number for the CISD number should the service be required will be (002) 343435. In relation to potential critical incidents, the only information we require is your name and phone number where you can be contacted within the upcoming hour.

Gerard Lawler
CISD TEAM CO-ORDINATOR

# Annexure "E"

# Fourth Newsletter

# TASMANIAN CRITICAL INCIDEN STRESS DEBRIEFING TEAM

## NEWSLETTER NO. 4

## FEBRUARY 1990

I am pleased to announce that 18 months after Emer Services and Associations agreed to establish the service, it is now fully operational. I wish to take opportunity to thank Police, Fire, Ambulance and Directors along with all Service Associations for their and support in the development phase. You may recall media attention regarding the finance for the service. have been assured that CISD will receive a recurring bu which will ensure the program's continuation.

WHAT IS CRITICAL INCIDENT STRESS?

Prof. Jeff Mitchell a psychologist and former parame firefighter from the States, developed the programme tha recognised by most Emergency Services worldwide for Crit Incident Stress Debriefing. Jeff has lectured in Hobart we have based our protocols on those that he developed. has described critical incidents as "any situation face Emergency Service personnel that causes them to experi unusually strong emotional reactions which have potential to interfere with their ability to function ei at the scene or later".

WHY DO WE NEED IT?

Emergency Service Officers have well developed co mechanisms and normally handle the day to day situat well. However from time to time there may be a job tha attend that causes us to think and feel quite differe from the others that we have attended. Some of the thou and feelings experienced may include: not being able stop thinking about the scene, difficulty in sleep flashbacks or dreams of the scene, frustration, diges problems, becoming withdrawn, headaches, and a gen feeling of being pre-occupied with the job more so others we have attended.

WHAT JOBS MAY CAUSE THESE THOUGHTS AND OR FEELINGS?

Death or injury of children, multiple casualties or dea dealing with body parts, death of a fellow officer in line of duty, a threat to your own life or safety, dea with a person/s known to you, or dealing with someone reminds you of them or a loved one, attending a high nu of difficult situations in a short space of time, unplea smells, such as blood or burning flesh, or any situa that may produce strong emotions and reactions a attending the scene.

* CALL OUT NO 002/343135

Leave your name and phone number where you can be contacted in the next one (1) hour. The Duty Co-ordinator will contact you for further information.

Any member/officer/supervisor may activate/consult the Duty Co-ordinator and is encouraged to do so if unsure about a particular job/scene. All Heads of Departments and Associations have agreed on the protocols and procedures and to ensure that every assistance will be given to facilitate the conduct of debriefings. This includes covering CISD Team members and officers attending debriefings when necessary.

WHO IS THE CISD TEAM?

The Team is made up of psychologists and team members who are officers from Police, Fire and Ambulance, all of whom have undergone specific training in Critical Incident Stress and its management.

The CLINICAL DIRECTOR assumes overall responsibility for the programme. The TEAM CO-ORDINATOR'S responsibility is to ensure debriefings are arranged as per protocols and procedures. AREA LIAISON OFFICERS assist in the preparation for a debrief, in education and in training. TEAM MEMBERS assist in debriefings and education for Emergency Service Officers. (See attached list of reference numbers should you require more information).

The Tasmanian CISD Team is in the debt of several persons for assisting us in our development. Prof. Jeffrey Mitchell for his work and foundation protocols in CISD. Dr Robyn Robinson, Psychologist and Director of the Victorian Team, along with Ms Sue McNulty, Victorian Police Psychologist, for their assistance in providing training for our Team. We thank them for their expertise, support, guidance and time.

With the recent disasters and major incidents that have occurred around Australia, and some of the effects these may have on us as Emergency Service Officers, I am sure you will agree this programme is long overdue and it is comforting to know it is available should you need it.

CISD transcends all union/management boundaries and has only one major objective. THE RESTORATION OF NORMAL JOB FUNCTIONING TO NORMAL PEOPLE WHO ARE EXPERIENCING NORMAL REACTIONS AND NORMAL SYMPTOMS OF DISTRESS AFTER BEING EXPOSED TO A HIGHLY ABNORMAL EVENT.

Gerard Lawler
CISD TEAM CO-ORDINATOR

# Annexure "F"

## Current Pamphlet

**Peer Debriefers**

are selected members specially trained to assist and support other members involved in critical incidents. Peer Debriefers work on a voluntary basis and are available to provide a range of services within the programme.

They will often be the first line of contact for those seeking assistance. Peer Debriefers will be involved in assessing the type of assistance required, organising and assisting with group debriefings, providing on-scene support, and one-to-one assistance.

**Team Psychologists**

provide a more in-depth follow-up service and assist with group debriefings as required. The psychologist provides support and supervision for the Peer Debriefers and is part of the CID Management Team.

## *Requests for assistance*

Requests for assistance are welcomed from anyone within the emergency services.

When a request is received, Control will notify the CID Management Team who will assess the situation and initiate appropriate action.

- *your local peer debriefer (listed with posters in all Stations);*
- *the 24hr number at ambulance headquarters (a peer will then be paged to return your call within the hour).*

**(002) 34 3135**

## *Benefits of the CID programme*

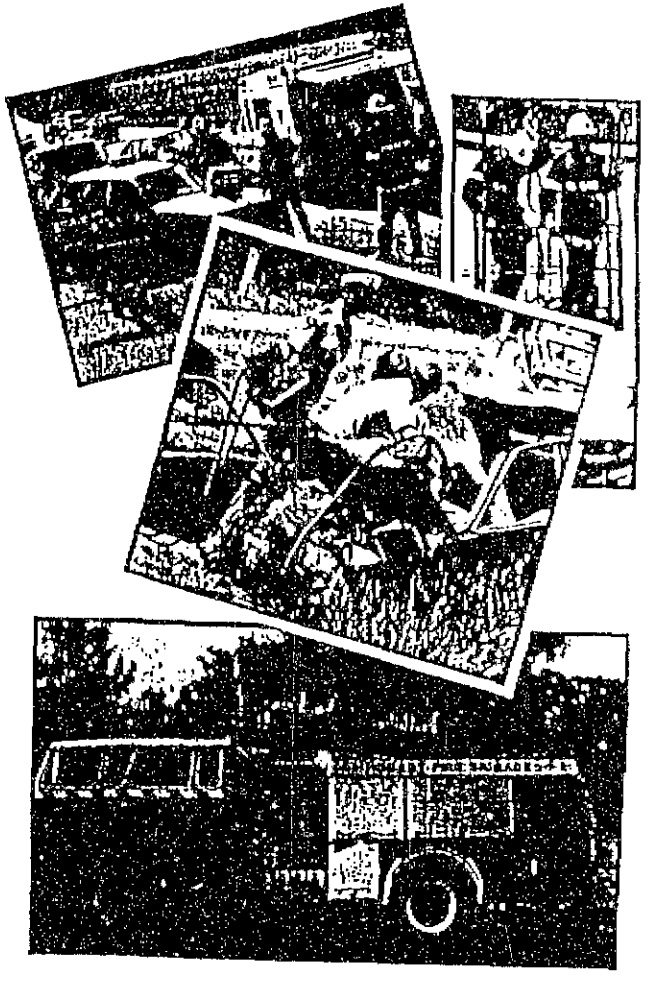
This programme is a major initiative extending the support services provided for members of the Tasmanian Emergency Services.

**The Key Goals are to:**

1. Acknowledge that emergency service workers experience normal feelings and reactions to abnormal and traumatic events in the course of their duty.
2. Provide a positive way to cope with the effects of dealing with these traumatic events.
3. Reduce the likelihood of delayed stress reaction.
4. Enhance work performance.
5. Reduce the impact of work related stress on the families of members.
6. Promote the health, welfare and safety of all members of the Tasmanian emergency services.

# DEBRIEFING PROGRAMME:

## Support for you



Tasmanian Emergency Service Personnel

## *Critical incident debriefing (CID) programme*

**Debriefing**
is available to all emergency service members following a critical incident.

**Information and training**
is available on how to manage the effects of a critical incident. Information is also available to member's families allowing them to gain a better understanding of critical incident stress.

The likelihood of serious problems building up over a period of time is reduced when information and support is provided. The normal recovery process of members is enhanced and recovery time shortened.

## *What is a critical incident?*

Emergency workers have chosen a demanding and challenging career, and one which exposes them to traumatic events in their normal course of duty. Members are affected differently by incidents as they occur during their service. It is the **reaction** of the individual which makes the incident **critical** for that person, not necessarily the size of the incident.

However, a relatively minor incident may be critical for an individual at any one time.

## *Confidentiality*

Strict confidentiality of all debriefing sessions conducted is maintained. No information regarding the name, personal reactions, feelings, problems or behaviour of any member will be recorded or disclosed to outside parties, unless it is the expressed wish or with the consent of the individual concerned.

Where group debriefing is used, the pledge of confidentiality commits all persons attending the debriefing to maintain the privacy of others in their group.

## *Involvement*

All members involved in a Critical Incident will be encouraged (but not compelled) to attend a debriefing. Attendance at a debriefing will be restricted to those involved in the incident, and the CID Team. *No 'observers' will be admitted.*

## *Type of assistance offered*

**Group Debriefing**
would most probably be undertaken after a major critical incident and may involve a small or a large group.

- is not an operational debrief;
- is available to everyone involved in the incident;
- would normally occur 1-7 days after the event.

The aim is to help people understand and manage their reactions, thereby accelerating a normal recovery.

**On-Scene Support**
A CID Team member can be present on-scene to provide immediate support and initial assistance to any distressed members:

- most likely to be appropriate at lengthy operations;
- may provide on-scene defusing if so required.

**Defusing**
This is a less structured version of a group debriefing and occurs immediately after the incident.

- usually held back at the Station;
- allows initial ventilation of feelings;
- stabilises working crews so that they can either go home or return to duty;
- eliminates the need for a formal debriefing or enhances that process.

**One-to-One**
Any member may request confidential one-to-one debriefing or follow-up assistance at any time:

- is available by telephone or face-to-face;
- allows more individual attention.

**Information and Referral**
Information about the programme of the effects of Critical Incident Stress is available from the Team members.

# Annexure "G"

## Police Gazette Notice No. 145/91

*Southern District*

nd 30 January 1992
nd 12 March 1992
nd 23 April 1992
d 4 June 1992
nd 16 July 1992
nd 27 August 1992
d 8 October 1992
nd 19 November 1992
nd 30 December 1992

mbers will be advised of venue and reporting times prior ch training session.

*North and North Western Districts*

nuary 1992
rch 1992
pril 1992
ay 1992
y 1992
ugust 1992
eptember 1992
ovember 1992
ecember 1992

bers will be advised of venue and reporting times prior ch training session.

erintendents are hereby directed to ensure that members l training as notified.

ed this nineteenth day of August 1991.

J. C. JOHNSON, Commissioner of Police.

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NOTICE No. 145

LICY REGARDING INVOLVEMENT IN CRITICAL DENT STRESS DEBRIEFINGS FOR THE TASMANIA POLICE FORCE

Tasmania Police Force endorses the Tasmanian Critical nt Stress Debriefing Team, and the Team's involvement management of debriefs.

Tasmanian CISD Team has been established to support ate's emergency service personnel, in the interest of ealth and well being. Its purpose is to lessen the impact itical incidents', to minimise the potential long term , and to promote a healthy, supportive work nment.

*of a Critical Incident Stress Debriefing*

bjective of a debriefing is to provide professional ention (shortly) after major incidents to minimise stress l illness and distress to officers of the Tasmania Police, nia Fire Service, Tasmanian Ambulance Service, State ency Service and other emergency services.

riefings are effective to:—

- lessen the impact of a critical incident;
- facilitate recovery in officers who are experiencing normal reactions to abnormal events;
- prevent the development or persistence of unresolved problems.

*lance Policy*

Tasmania Police Force, with other emergency services, greed on standard criteria for mandatory attendance. s who attended the following types of incidents should the Critical Incident Stress Debriefing:—

- death or serious injury of a colleague in the line of duty;
- suicide of a fellow officer;
- situations that threaten the life or safety of staff;
- any incident involving firearms;
- situations involving injury or death of children;
- any other situation that may produce a high level of immediate or delayed emotional reaction in one or more officers.

*Confidentiality*

It should be noted that in no way is a CISD connected to or similar to a department operational debrief. The Critical Incident Stress Debriefing is the responsibility of the Clinical Director, Dr Graham Perkin, or the team co-ordinator, Gerard Lawler, from Emergency Services. There is no reporting back to the department in any way. Outcomes of all debriefings are STRICTLY CONFIDENTIAL. There is not reporting by the team to any section of the department, nor should they be requested to.

All officers responsible for the command of members are required to be familiar with the procedures, protocols and activation of the CISD Team.

The above policy is effective from this date, and supported from all levels of administration, management and operations.

Dated this nineteenth day of August 1991.

J. C. JOHNSON, Commissioner of Police.

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NOTICE No. 146

PUBLICITY AND PUBLIC RELATIONS

Attention is drawn to the provisions of sections 30 and 31 of Tasmania Police Standing Orders and Reference Manuals.

These sections relate to publicity and public relations.

All personnel are directed to strictly comply with their provisions and in particular the provisions of 30.3 and 30.4.

These sections relate to Restricted Information and Conduct and the Prohibitions of making Public Statements.

All Superintendents are to ensure that members under their control adhere to these provisions.

Dated this nineteenth day of August 1991.

J. C. JOHNSON, Commissioner of Police.

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NOTICE No. 147

MIL KEYS

*Access to and within the Support Services Building*

All personnel who have been issued with the blue MIL key used for access to and within the Support Services building are responsible for the safe keeping of that key.

In the event of a lost key, it is necessary for the officer concerned to pay $10 for a replacement, which can be paid to the Cashier, Finance Branch, who will issue a receipt.

The receipt must be sighted by Inspector R. Martin or other designated officer, who will then arrange for another key to be programmed.

Dated this nineteenth day of August 1991.

J. C. JOHNSON, Commissioner of Police.

# Annexure "H"

# Police Gazette Notice No. 107/93

Written notice of appeal, setting forth the particulars of the round thereof, shall be lodged with the Secretary to the Board within twenty-one days of the publication of this notice.

Dated this twenty-fourth day of May 1993.

J. C. JOHNSON, Commissioner of Police.

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NOTICE No. 103

TASMANIA

POLICE REGULATION ACT, 1898
NOTICE BY COMMISSIONER OF INTENTION TO APPOINT
POLICE OFFICER TO HIGHER RANK

Notice is hereby given that it is my intention to appoint rst Class Constable Bretton James SMITH No. 1505 to the nk of Senior Constable.

A Police Officer may appeal to the Police Promotions ppeal Board against this proposed appointment on the ound only of superior efficiency as defined by Section 49R ) of the Act.

Written notice of appeal, setting forth the particulars of the ound thereof, shall be lodged with the Secretary to the ard within twenty-one days of the publication of this notice.

Dated this twenty-fourth day of May 1993.

J. C. JOHNSON, Commissioner of Police.

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NOTICE No. 104

POLICE REGULATION ACT 1898

Notice No. 96 Police Gazette 1993 relates to a vacancy Officer-in-Charge, Queenstown Division.

Notice No. 97 relates to a vacancy for Officer-in-Charge, oraine Division.

Notice No. 98 relates to a vacancy for Officer-in-Charge, man Resources Branch, Management Support.

Notice No. 99 relates to a vacancy for District Administration cer, Eastern District.

No. 100 relates to a vacancy for District Administration cer, Southern District.

otice No. 101 relates to a vacancy within the Policy and ning Branch, Management Support.

otice No. 102 relates to a vacancy within the Criminal stigation Branch, Hobart.

otice No. 103 relates to vacancy for Officer-in-Charge, e Station, Strahan.

ated this twenty-fourth day of May 1993.

J. C. JOHNSON, Commissioner of Police.

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NOTICE No. 105

REGIONAL DISASTERS CONTROLLERS COURSE

Regional Disasters Controllers Course will be conducted e Police Academy, Rokeby, between 28 June and 9 July l.

pplications are invited from Superintendents and ctors desirous of attending the Course.

pplications should be forwarded to the Superintendent, uitment and Training, Rokeby, no later than 14 June

ted this twenty-fourth day of May 1993.

J. C. JOHNSON, Commissioner of Police.

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NOTICE No. 106

POLICE OFFICERS NOT IDENTIFYING THEMSELVES

The attention of all members is drawn to Standing Order 3·1—Certificates of Identification.

'Personal shall carry the certificate at all times whether on or off duty, and shall produce it to any person requiring proof of their identity'.

Police Officers when dealing with members of the public are to introduce themselves, and produce their Certificate of Identification if requested.

Members are directed to comply with the provisions of Standing Order 3·1 and this Notice.

Dated this twenty-fourth day of May 1993.

J. C. JOHNSON, Commissioner of Police.

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NOTICE No. 107

TASMANIA POLICE POLICY DOCUMENT No. 06/93
CRITICAL INCIDENT STRESS DEBRIEFING POLICY FOR TASMANIAN EMERGENCY RESPONSE ORGANISATIONS.

Members are advised that Tasmania Police Policy Document No. 06/93 dealing with the abovementioned subject is now being distributed to all Superintendents.

Dated this twenty-fourth day of May 1993.

J. C. JOHNSON, Commissioner of Police.

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NOTICE No. 108

TASMANIA POLICE DOCUMENT No. 07/93
GENERAL SEARCH WARRANTS

Members are advised that Tasmania Police Policy Document No. 07/93 dealing with the abovenamed subject is now being distributed to all Superintendants.

Dated this twenty fourth day of May 1993.

J. C. JOHNSON, Commissioner of Police.

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NOTICE No. 109

TASMANIA POLICE POLICY DOCUMENT No. 09/93
COMPULSORY TRANSFERS—AN AGREEMENT BETWEEN THE COMMISSIONER OF POLICE AND THE POLICE ASSOCIATION OF TASMANIA

Members are advised that the Tasmania Police Policy Document No. 09/93 relating to an agreement between the Commissioner of Police and the Police Association of Tasmania in respect to compulsory transfers is now being distributed to all Superintendants.

Members should avail themselves of the information contained in the abovenamed document.

Dated this twenty-fourth day of May 1993.

J. C. JOHNSON, Commissioner of Police.

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NOTICE No. 110

TASMANIA POLICE POLICY DOCUMENT No. 11/93

INDUSTRIAL ACCIDENTS/HAZARDOUS-SUBSTANCE INCIDENT PROCEDURES

Members are advised that Tasmania Police Policy Document No. 11/93 dealing with the abovenamed subject is now being distributed to all Superintendents.

# Annexure "I"

# Policy Document

# Tasmanian Emergency Service Critical Incident Stress Debriefing Policy

The Tasmanian Ambulance Service, Tasmania Fire Service, Tasmania Police and the State Emergency Service hereafter referred to as T.E.S. endorse the Tasmanian Critical Incident Stress Debriefing Team and the Team's involvement in the management of debriefing/defusing activities. This policy is agreed by the four agencies as a common policy for critical incident stress management activities within each agency

The Tasmanian C.I.S.D. Team has been established to support the T.E.S. personnel in the interest of staff health and well being. It's purpose is to lessen the impact of 'critical incidents', to minimise the potential long term effects and to promote a healthy, supportive work environment.

## Purpose of Critical Incident Stress Debriefing/Defusing

The object of a debriefing/defusing is to provide professional intervention shortly after major incidents to minimise stress related illness and distress to officers, including volunteers, of emergency response agencies:

Debriefing/Defusings are effective to:

- *lessen the impact of a critical incident;*
- *facilitate recovery of personnel who are experiencing normal reactions to abnormal events;*
- *prevent the development or persistence of unresolved problems.*

## Attendance Policy:

The Tasmanian emergency services have agreed on standard criteria for mandatory attendance of critical incident stress debriefing/defusing sessions. Personnel who attend the following types of incidents should participate in critical incident stress debriefing/defusing sessions:

- *death or serious injury of a colleague in the line of duty;*
- *suicide of another officer;*
- *situations that threaten the life or safety of staff;*
- *any incident involving threat from firearms;*
- *situations involving injury or death of children;*
- *any other situation that may produce a high level of immediate or delayed emotional reaction in one or more personnel*

## Location

Debriefing/defusings are normally held separately from the normal working environment where ample space, privacy and freedom from distraction are provided.

## Non-Operational Status

In all instances personnel attending debriefing/defusing activities shall be considered non-operational for the duration of the debrief

## Payment

Personnel off-duty who are required to attend a debriefing/defusing activity are to be paid where appropriate in accordance with their Award Conditions or as otherwise agreed.

## Release of CISD Team Members

Management shall release C. I. S. D. team members from duty for participation/preparation in debriefing/defusing and training sessions.

## Support

Management undertakes to provide C.I.S.D. team members with transport and other necessary support for C.I.S.D. activities wherever possible.

## Volunteers

Volunteers should not be required to fund their own expenses related to attendance at debriefing/defusing activities.

## Confidentiality

It should be noted that in no way is a critical incident stress debriefing/defusing connected to an agency operational debriefing. The critical incident stress debriefing/defusing is the responsibility of the Clinical Director or the Team Co-ordinator. There is no reporting of critical incident stress debriefing/defusing matters back to the agency in any way. Outcomes of all debriefing/defusings are ***strictly confidential.***

## Management Responsibility

All personnel with a staff responsibility are required to be familiar with the activation procedures and protocols of the C.I.S.D. Team.

# Annexure "J"

# Original Team Structure

TASMANIA

# OFFICE OF THE DIRECTOR OF EMERGENCY SERVICES

## TASMANIAN CRITICAL INCIDENT STRESS DEBRIEFING TEAM

### TEAM STRUCTURE

CO-ORDINATING COMMITTEE

REPRESENTATIVES
HEAD OF DEPARTMENTS, TASMANIA FIRE SERVICE, TASMANIA POLICE, TASMANIAN AMBULANCE SERVICE, SES, ITIM, MENTAL HEALTH SERVICES COMMISSION, VIETNAM VETERANS COUNSELLING SERVICE, CORRECTIVE SERVICES TASMANIA, COMMUNITY WELFARE, POLICE ASSOCIATION, AMBULANCE EMPLOYEES ASSOCIATION, UNITED FIREFIGHTERS UNION, PRISON OFFICERS ASSOCIATION.

EXECUTIVE COMMITTEE

CLINICAL DIRECTOR - DEPUTY CLINICAL DIRECTOR
TEAM CO-ORDINATOR - DEPUTY TEAM CO-ORDINATOR

CLINICAL DIRECTOR
DEPUTY CLINICAL DIRECTOR

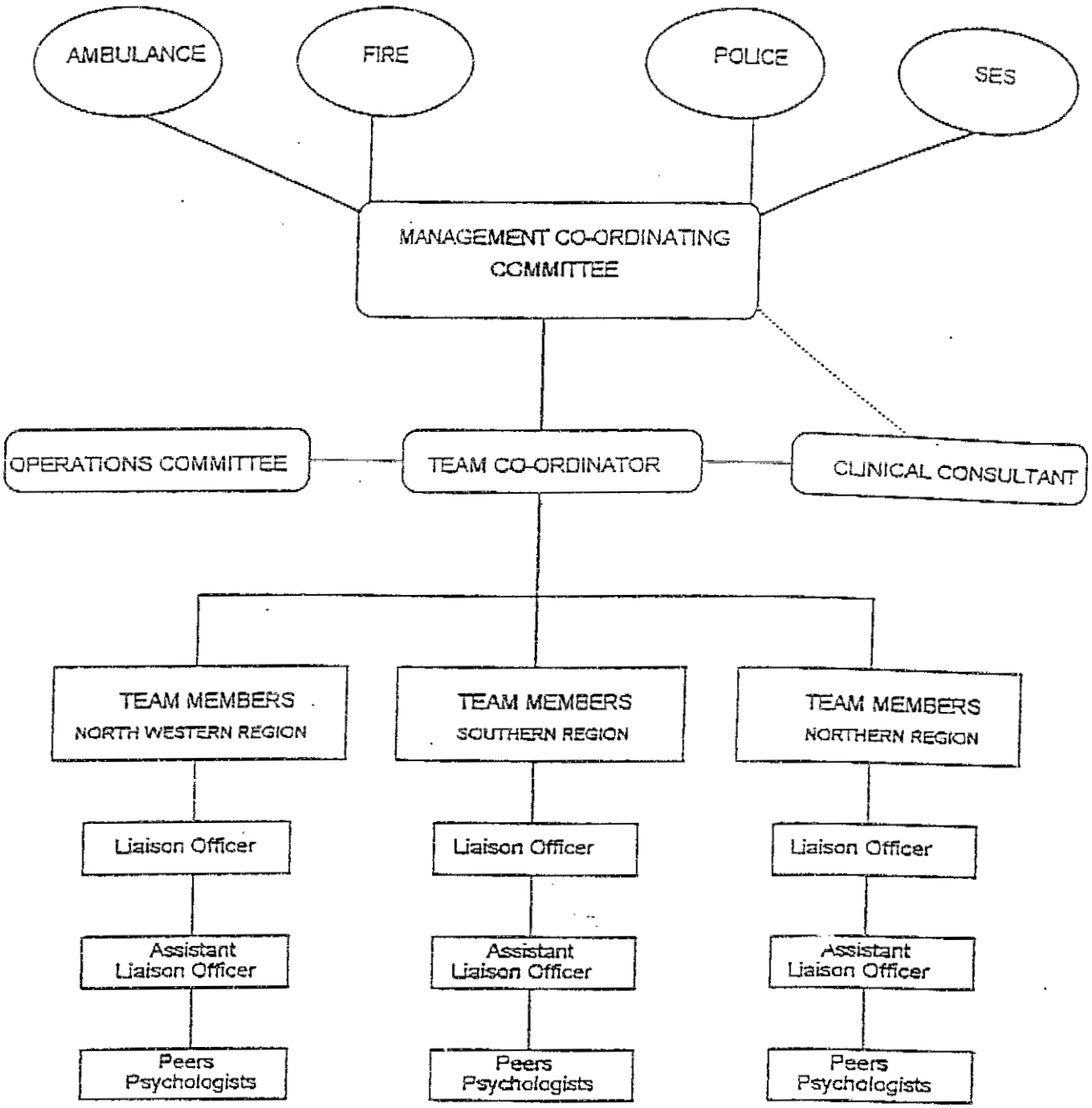
C.I.S.D. TEAM
PEER SUPPORT
OTHER MENTAL HEALTH CARE PROFESSIONALS

C.I.S.D. RESOURCE GROUP

# Annexure "K"

# Current Team Structure

Tasmanian Emergency Services Critical Incident Stress Debriefing Team




Team Structure as at 30th of June 1995

# Attachment - 1994/1995 Annual Report

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| 5. | Team Composition | *Page* | *4* |
| 6. | Team Utilisation | *Page* | *5* |
| | • *Tasmanian Ambulance Service Activation/Intervention Report* | *Pages* | *6* |
| | • *Tasmania Fire Service Activation/Intervention Report* | *Pages* | *7* |
| | • *Tasmania Police Force Activation/Intervention Report* | *Pages* | *8* |
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Annexure "A" *Pages 19 - 24*
- *Robinson Review Recommendations (as amended)*

Annexure "B" *Page 25*
- *Members of the Management Co-ordinating Committee*
- *Members of the Operations Committee*

Annexure "C" *Pages 26 - 27*
- *Team Members*

# 1. Aim

1.1. The Tasmanian Emergency Services Critical Incident Stress Debriefing (CISD) Team aims to enable emergency service workers to more efficiently and effectively deal with the stress which is associated with a critical or traumatic incident.

1.2. Whilst an individual's stress reaction might vary from mild to severe the impact might be felt not only by the emergency service worker but also by their family, and their service. Through the provision of a CISD program the impact of critical incidents is lessened thereby minimising the potential long term effects. This results in many benefits accruing to the respective emergency services.

# 2. Background

2.1. The welfare of emergency service personnel has long been recognised as being essential to the maintenance of efficient and effective emergency service agencies. The maintenance of emergency service personnel's psychological well-being has been greatly assisted through the development and maintenance of the Critical Incident Stress Debriefing Model which was developed by Professor J Mitchell.

2.2. The Tasmanian Emergency Services Critical Incident Stress Debriefing (CISD) Team, which was formed in 1988, has a multi-agency focus. It serves the;

- *Tasmanian Ambulance Service,*
- *Tasmania Fire Service,*
- *Tasmania Police Force, and*
- *State Emergency Service.*

2.3. The Team serves the (approximately) ten thousand emergency service personnel, both permanent and volunteer, who work within Tasmania.

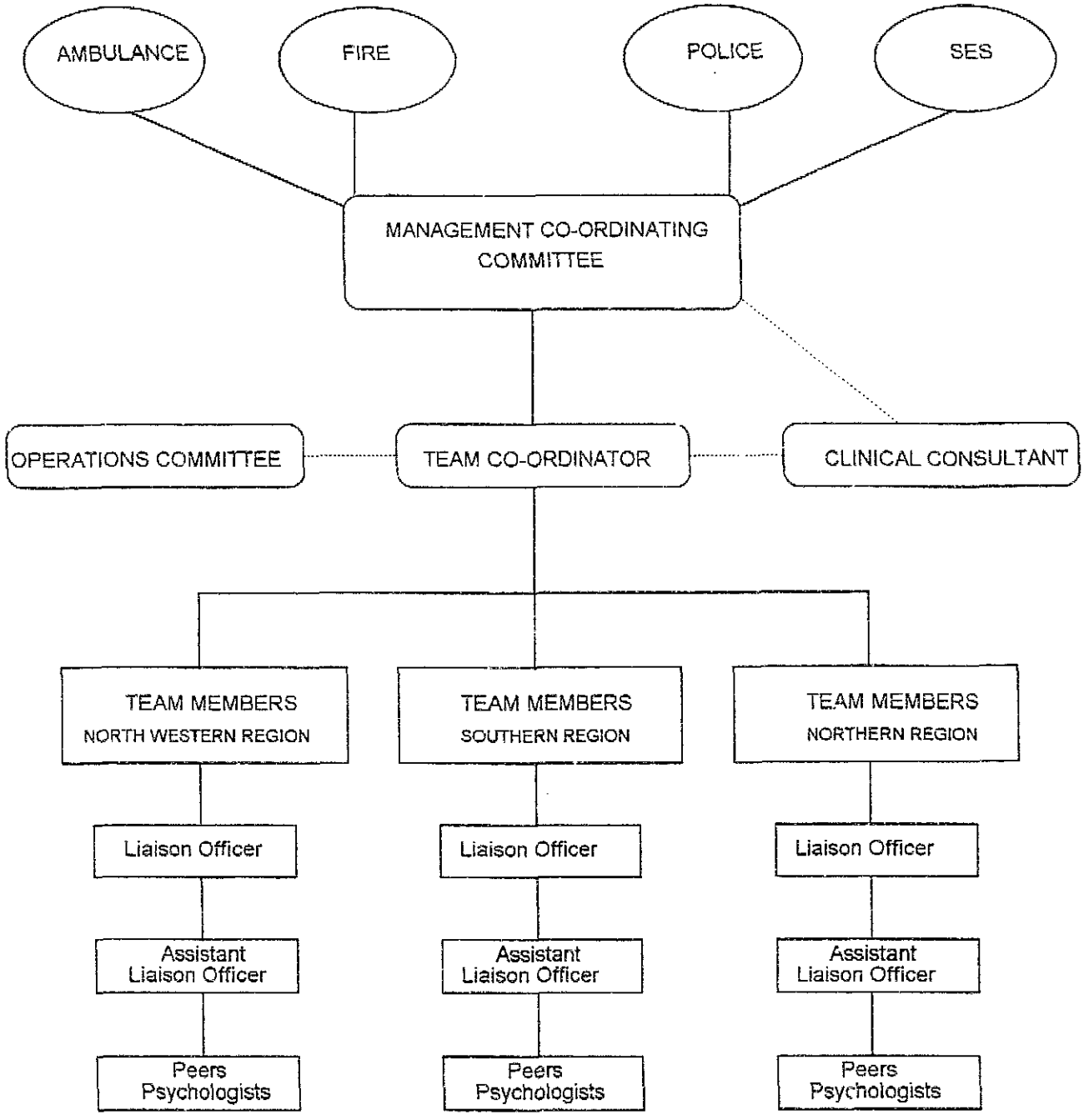
2.4. The Team is able to provide a state-wide response twenty four hours a day, seven days a week.

# 3. The Robinson Review

3.1. A review into the structure and functioning of the Team was conducted by Dr. Robyn Robinson (Victoria) in November 1994. The review was comprehensive and resulted in twenty nine recommendations being made. The recommendations (as accepted) and the action taken in relation to each recommendation is attached at Annexure "A".

# 4. Profile

4.1. The Team structure is set out below;



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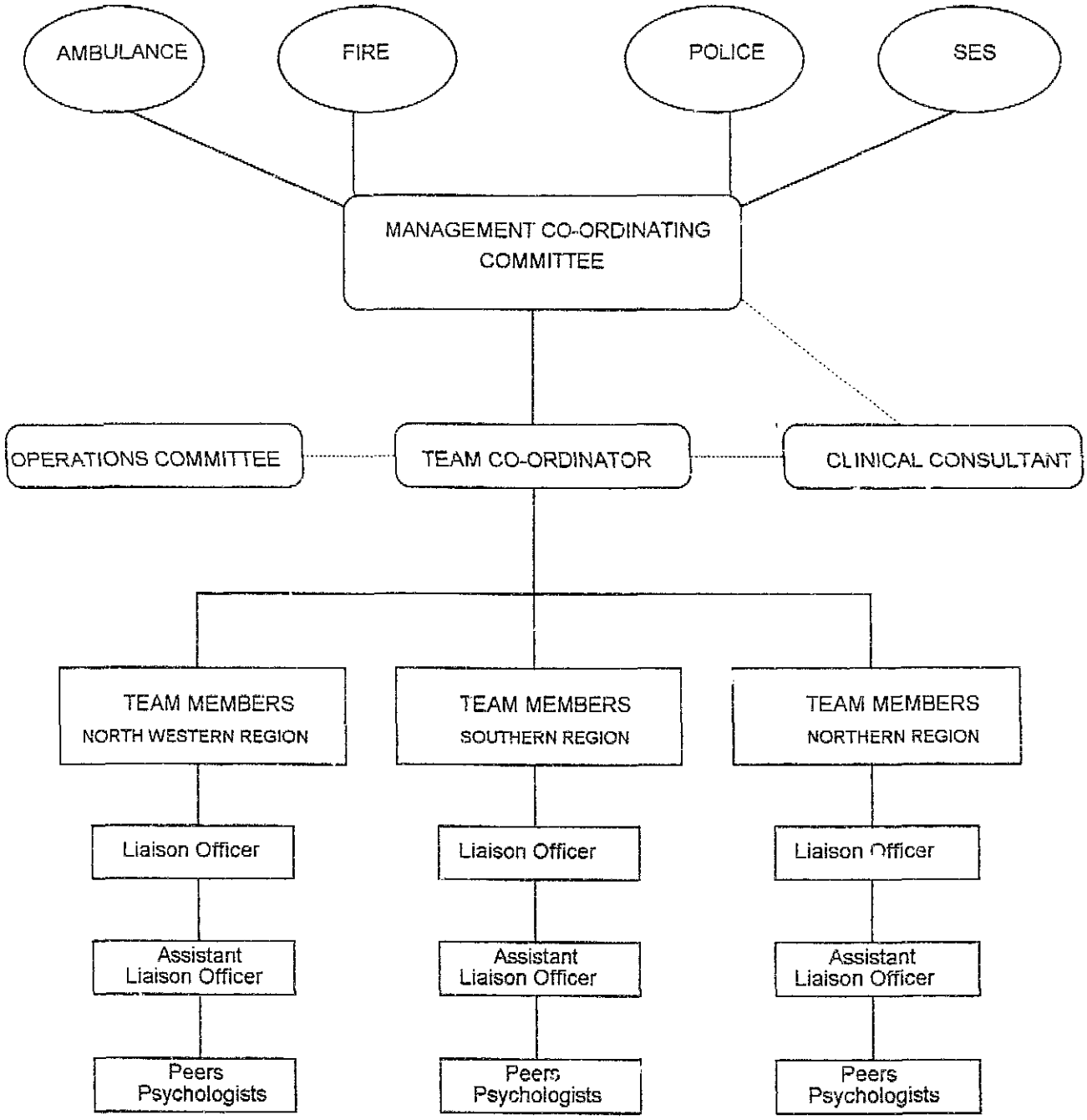


**4.2.** The Management Co-ordinating Committee is made up representatives of heads of agencies, union/association representativ the clinical consultant, the team co-ordinator and a team representativ A list of Management Co-ordinating Committee members is attached at Annexure "B".

**4.3.** The Operations Committee has six members. They are the;

1. *Clinical Consultant*
2. *Psychologist Representative*
3. *Liaison Officer - North Western Region*
4. *Liaison Officer - Southern Region*
5. *Liaison Officer - Northern Region*
6. *Team Co-ordinator*

Personnel on the Operations Committee are attached at Annexure "B".

**4.4.** The Team proper is made up of emergency service workers (peers) and mental health professionals (psychologists). The peers are drawn from within the agencies and undergo an extensive selection process. The psychologists are drawn from both the public and private sector and are utilised on a "user pays" basis. The positions of Liaison Officers and Assistant Liaison Officers are filled annually by nominations from within the Team. A list of current team members is attached at Annexure "C".

## 5. Team Composition

5.1. During the year there have been substantial changes to the personnel involved in the Team. Significant movement out of the Team has occurred with a number of people retiring or resigning from their agency. Several personnel have also withdrawn due to other commitments.

5.2. The position of Clinical Director, which was unpaid, was filled by the Police Psychologist, Mr Simon Webb. Mr Webb resigned from Tasmania Police and filled the Clinical Director position on a consultancy basis until the appointment of the new Police Psychologist Dr. Michael Ryan. The position has since been re-titled "Clinical Consultant".

5.3. The part-time Team Co-ordinator position was also vacated during the year by Ms Leeanne Adams upon her transferring from the Police Staff Support Unit. The position was filled, temporarily, by Mr Gary Muldoon (SES), Mr Wayne Richards (Fire) and Mr Geoff Becker (Ambulance).

5.4. The Team Co-ordinator position is now full time and is to be shared on a twelve month rotating basis amongst the Tasmanian Ambulance Service, Tasmania Fire Service and Tasmania Police. Tasmania Police will initially provide the Co-ordinator for the first two years. The State Emergency Service is to cover periods of annual leave.

5.5. The Team Co-ordinator's position is currently filled by a Police Officer, Mr Matthew Richman.

5.6. Team numbers currently stand at what is considered a minimum establishment level. Personnel who withdrew from the Team have been replaced although there is a need for further recruitment.

5.7. The Team composition is currently;

| CISD Region: | Police | Fire | Ambulance | SES | Sub-Total | Psychologists | Total |
|---|---|---|---|---|---|---|---|
| **Southern** | 7 | 5 | 4 | 1 | 17 | 8 | 25 |
| **Northern** | 7 | 3 | 3 | 0 | 13 | 2 | 15 |
| **North Western** | 6 | 3 | 3 | 1 | 13 | 2 | 15 |
| **Total** | 20 | 11 | 10 | 2 | 43 | 12 | 55 |

# 6. Team Utilisation

**6.1.** During the 1994 - 1995 financial year, the CISD Team was activated on eighty occasions.

- *Defuses:*

  Forty two defuses were conducted and out of these seven debriefs occurred.

- *Debriefs:*

  According to the Mitchell Model, debriefs are defined as involving three or more persons - on this basis a total of thirty eight debriefs were conducted. Another fourteen were held that involved less than three persons. These were modified to accommodate the situation but largely follow the CISD process. This form of "debrief" is an integral part of the service that the Team provides.

**6.2.** The activity statistics are as follows;

| Intervention | Permanent | Volunteer | Total |
|---|---|---|---|
| *Assessed* | 684 | 212 | 896 |
| *Defused* | 123 | 35 | 158 |
| *Debriefed* | 140 | 116 | 256 |
| *Followed-up* | 67 | 47 | 114 |

**6.3.** From the figures given it can be seen that 54.7% of volunteers exposed to a critical incident move to a full debrief whereas this occurs with only 20.5% of permanents. There are a large number of reasons for this and, although a full examination of the data has not been possible, some trends are occurring. These are addressed in the issues section.

## 6.4. Tasmanian Ambulance Service

**6.4.1** During the 1994 - 1995 financial year the CISD Team responded to forty three incidents which involved personnel from the Tasmanian Ambulance Service. Twenty one defuses were conducted and four debriefs resulted from these defuses. A total of seventeen debriefs were conducted for members of the Tasmanian Ambulance Service (some were held jointly with other services)

| Intervention | Permanent | Volunteer | Total |
|---|---|---|---|
| *Assessed* | 132 | 92 | 224 |
| *Defused* | 51 | 14 | 65 |
| *Debriefed* | 27 | 47 | 74 |
| *Followed-up* | 11 | 15 | 26 |

**6.4.2** From these figures it can be seen that 51.0% of volunteers exposed to a critical incident were debriefed as compared to 20.5% of permanents.

## 6.5. Tasmanian Fire Service

6.5.1 During the 1994 - 1995 financial year the CISD Team responded to twenty four incidents which involved members of the Tasmania Fire Service. Nine defuses were conducted and one debrief followed from the defuses. A total of twelve debriefs were conducted for members of the Tasmania Fire Service (some were held jointly with other services).

| Intervention | Permanent | Volunteer | Total |
|---|---|---|---|
| *Assessed* | 71 | 86 | 157 |
| *Defused* | 27 | 18 | 45 |
| *Debriefed* | 2 | 55 | 57 |
| *Followed-up* | 4 | 27 | 31 |

6.5.2 From these figures it can be seen that 64% of volunteers exposed to a critical incident were debriefed as compared to 2.8% of permanents.

## 6.6. Tasmania Police Force

**6.6.1** During the 1994 - 1995 financial year the CISD Team responded to sixty one incidents involving members of the Tasmania Police Force. Eleven defuses were conducted and, of these, two were also debriefed. A total of twenty two debriefs were conducted.

| Intervention | Permanent | Volunteer | Total |
|---|---|---|---|
| *Assessed* | 480 | | 480 |
| *Defused* | 45 | | 45 |
| *Debriefed* | 111 | | 111 |
| *Followed-up* | 52 | | 52 |

**6.6.2** Of the police officers assessed following exposure to a critical incident 23.1% were debriefed.

## 6.7. State Emergency Service

6.7.1 During the 1994 - 1995 financial year, the CISD Team responded to nine incidents in which personnel of the State Emergency Service were involved. One defuse and four debriefs were conducted.

| Intervention | Permanent | Volunteer | Total |
|---|---|---|---|
| *Assessed* | 1 | 34 | 35 |
| *Defused* | | 3 | 3 |
| *Debriefed* | | 14 | 14 |
| *Followed-up* | | 5 | 5 |

6.7.2 Of the State Emergency Service volunteers who were exposed to critical incidents 41.2% were debriefed.

# 7. Utilisation Comparison

7.1. The following figures provide a comparison of the number of personnel who were serviced by the Team in the 1994 - 1995 financial year.

## 7.2. Assessments

| *Service* | *Permanent* | *Volunteer* | *Total* |
|---|---|---|---|
| *Tasmanian Ambulance Service* | 132 | 92 | 224 |
| *Tasmania Fire Service* | 71 | 86 | 157 |
| *Tasmania Police Force* | 480 | | 480 |
| *State Emergency Service* | 1 | 34 | 35 |

## 7.3. Defuses

| *Service* | *Permanent* | *Volunteer* | *Total* |
|---|---|---|---|
| *Tasmanian Ambulance Service* | 51 | 14 | 65 |
| *Tasmania Fire Service* | 27 | 18 | 45 |
| *Tasmania Police Force* | 45 | | 45 |
| *State Emergency Service* | | 3 | 3 |

## 7.4. Debriefs

| *Service* | *Permanent* | *Volunteer* | *Total* |
|---|---|---|---|
| *Tasmanian Ambulance Service* | 27 | 47 | 74 |
| *Tasmania Fire Service* | 2 | 55 | 57 |
| *Tasmania Police Force* | 111 | | 111 |
| *State Emergency Service* | | 14 | 14 |

## 7.5. Follow-ups

| *Service* | *Permanent* | *Volunteer* | *Total* |
|---|---|---|---|
| *Tasmanian Ambulance Service* | 11 | 15 | 26 |
| *Tasmania Fire Service* | 4 | 27 | 31 |
| *Tasmania Police Force* | 52 | | 52 |
| *State Emergency Service* | | 5 | 5 |

NB: The follow-up figures are not final as some follow-ups are ongoing.

## 8. Utilisation of Personnel

8.1. Throughout the year there has been a substantial commitment by Team members to the CISD Program. This commitment has been in terms of the hours expended in actual operational activity and educational and training programs.

8.2. The number of hours which have been expended would be in the thousands. This level of commitment and dedication by all team members reaffirms their faith in the program and their willingness to assist their fellow emergency service personnel.

## 9. Evaluation by Service Recipients

9.1. The Team has continued to distribute evaluation reports to personnel who participate in a critical incident stress debrief. The evaluation reports are distributed with a request that they be completed and returned. The return rate varies tremendously depending on the incident but broadly it is;

- ***Permanents:*** **30.9%**
- ***Volunteers*:** **62.2%**

9.2. The evaluation reports provide a descriptive analysis of the incidents impact (see "critical incident" section) and the impressions of the benefit or otherwise of the debriefing process.

9.3. Participants were asked to rate the value of the debriefing session to themselves and to the group as a whole. The following ratings were obtained;

### Value to Individuals

| | No Value | Moderately Valuable | Very Valuable |
|---|---|---|---|
| *Permanents* | 7.0% | 48.8% | 44.2% |
| *Volunteer* | 1.4% | 31.9% | 66.7% |

### Value to the Group

| | No Value | Moderately Valuable | Very Valuable |
|---|---|---|---|
| *Permanents* | 0.0% | 29.7% | 70.3% |
| *Volunteer* | 0.0% | 14.5% | 85.5% |

9.4. These figures provide an indication of the extent to which critical incident stress debriefing is valued, received, and seen to be of benefit to personnel of the Tasmanian Emergency Services.

9.5. Participants were also asked to state ways in which they believed their service could help employees who experienced critical incidents. A number of the responses are reproduced below;

- *It is a good chance to speak to other persons regarding your incident without them being close friends or family whom you might hold back from.*
- *Continue to offer the CISD Service and get management not to ridicule its importance*
- *A greater understanding of the CISD role and their acceptance of CISD*
- *Management supporting CISD*
- *Make people aware the CISD service is available and encourage its use*
- *By being pro-active in its support*
- *Continue CISD*
- *Availability of debriefing*
- *Debriefing should be compulsory for all volunteer persons involved with fatalities*
- *Just keep the CISD group going*
- *More education as to the availability of this service*
- *Keep up with the debriefing*
- *Make it mandatory*
- *CISD should be available for all members at any time for any incident*
- *Just to keep doing what they are doing by supplying people like myself with the help needed - and be supportive.*
- *Be there if needed*

- *Ensure, as is currently being done, that every person involved in a critical incident is invited to participate in stress debriefing*
- *I found the debrief to be very professional and very well run*
- *Everything done to date has been excellent*
- *Time out and CISD - plenty of support and contact*
- *I thought the counselling was carried out in a professional manner*
- *CISD helps employees see how the incident affects each other and that your own feelings are sometimes similar to other workers.*
- *I feel our service hierarchy are committed to CISD and a very reasonable job is being done*
- *It is very good to be able to have someone on our own level to talk things over with.*

## 10. Issues

**10.1.** There appears to be a number of trends which continue to occur and impact upon the delivery of emergency services within this State. A more comprehensive analysis is to be undertaken once the data base is established but a cursory examination of the incidents reveals some interesting points.

**10.2.** The higher rate of volunteers who undergo critical incident stress debriefing is perhaps indicative of the fact that;

- *overall volunteers have less exposure to critical incidents and therefore when they occur they have a greater impact.*
- *volunteers are prevalent in close knit communities and critical incidents which occur in these areas often involve relatives of the volunteers*

**10.3.** Many of the permanent and volunteer personnel who underwent critical incident stress debriefing were involved in incidents which could be defined as stereotypical critical incidents. However, others became significant for a number of reasons. These included;

- *uncertainty, and*
- *a personalisation of the incident*

Whilst the personalisation of an incident is something which is difficult to develop a strategy against, uncertainty can be countered in many circumstances. As the saying goes "forewarned is forearmed" and this is certainly the case for emergency service personnel. A number of critical incidents which caused great distress to personnel arose through there being misinformation or a lack of information about the scenes that they were attending. For example, if personnel are dispatched to a motor vehicle accident with no injuries and they arrive to find it a fatal motor vehicle accident then psychologically they might be unprepared or underprepared for it. This unpreparedness might result in critical incident stress and could have been avoided.

# 11. Critical Incidents

**11.1.** The critical incidents that the Team responded to included;

- *The Death Of Emergency Service Personnel*
- *Multiple Fatalities*
- *Emergency Service Personnel's Life Being Threatened*
- *Children Killed*
- *Police Shooting*
- *Murders*
- *Suicides*
- *Fatal Bush Accidents*
- *Fatal Industrial Accidents*
- *Gruesome Sudden Deaths*
- *Fatal Fires*
- *Sieges*
- *Blood And Body Fluid Exposures*
- *Sudden Infant Death*
- *Helicopter Crash*
- *Plane Crash*
- *Fatal Motor Vehicle Accidents*

**11.2.** Personnel who completed the evaluation report were asked to give an indication of the impact of the incident on them - both at the time of the incident and a few days after the incident. The results of the "Impact of Event Scale" are produced below.

***1 = No Impact, 3 = Moderate Impact, and 5 = Great Impact***

| Permanent | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| *Then* | 4.7% | 18.6% | 25.6% | 32.5% | 18.6% |
| *Now* | 20.9% | 37.2% | 27.9% | 7% | 7% |

| Volunteer | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| *Then* | 4.3% | 8.7% | 37.7% | 26.1% | 23.2% |
| *Now* | 23.2% | 43.5% | 30.5% | 1.4% | 1.4% |

**11.3.** From these figures it can be seen that attendance at critical incidents do have an impact on personnel and that the impact is predominantly moderate to great amongst both permanents (76.7%) and volunteers (87%).

N.B. these figures are rudimentary and a more comprehensive analysis would be required to assess the types of incidents that have the greatest impact. Additionally, an analysis on an individual basis of what personnel reported "then" and "now" would also be of benefit.

## 12. Funding and Financial Expenditure

**12.1.** The operating budget of the Team was $33,500. Funding was obtained through an $18,000 allocation from the State Government with the remainder being contributed on a percentage basis by the four agencies.

**12.2.** The allocation of expenditure can be categorised as (approximately);

| | |
|---|---|
| *Psychologists fees (including training days)* | **44.7%** |
| *Training* | **23.0%** |
| *Miscellaneous (postage, meal claims etc.)* | **18.5%** |
| *Communications (pagers and phone reimbursement)* | **13.8%** |

## 13. Training

**13.1.** Training is of paramount importance to the continued successful operation of the CISD Team. Currently there is interagency agreement that team members will be released for four training sessions per annum.

**13.2.** A major three day training course was conducted in August 1994 and this has since been supplemented with single training days. A basic training course for new team members was held in July 1995.

## 14. Education

**14.1.** A priority for the Team is the provision of an education/information program for all emergency service personnel within the State.

**14.2.** The program is yet to be finalised although education sessions are currently occurring.

# 15. Initiatives

## 15.1. *Staff Support and Services Manual*

A proposal which is to be considered is the establishment of a "*Staff Support and Services Manual*". This manual will be aimed at supervisors/managers and will cover a whole range of personnel related issues. The manual will enable supervisors/managers to be more readily conversant with matters which deal with the "welfare" of officers under their control and will result in a more efficient exercise of the duty of care. It is intended that the manual be agency specific.

## 15.2. *Evaluation Database*

A proposal has been put up to the Tasmania Police Information Technology Board of Management for the establishment of a database from which the information contained within evaluation reports can be drawn and analysed. From this information current trends can be obtained and information given to management on the sorts of incidents which have a propensity to lead to critical incident stress. This will result in better overall management of personnel.

## 15.3. *Mentor System*

New Team members are now placed under the supervision of an experienced team member who acts as their mentor. This system has been established to provide new members with an immediate and accessible partner who is conversant with the critical incident stress debriefing process.

## 15.4. *Training Programs*

In recent months a number of approaches have been made to the Team from governmental agencies interested in establishing similar programs. The potential exists for training programs to be conducted for these agencies.

# 16. Conclusion

**16.1.** The 1994 - 1995 financial year has seen significant changes to the Tasmanian Emergency Services Critical Incident Stress Debriefing Team.

**16.2.** The Team has fulfilled its core role of providing a debriefing service to the Tasmanian Emergency Services.

**16.3.** The Tasmanian Emergency Services Critical Incident Stress Debriefing Team is highly regarded nationally. Inter-service co-operation makes the Team unique and results in the delivery of a service which is representative of a "best-practice" approach. Within Tasmania, other government departments and private industry are highly complimentary of our CISD program and many are in the process of establishing their own.

**16.4.** The evaluation reports clearly demonstrate that emergency service personnel think highly of the CISD service. It is well received and well respected across all agencies.

# Annexure "A"

## Robinson Review Recommendations (as amended)

*Recommendation 1*
**The Management Committee to review the need for, role and composition of CISM Team Executive.**

The operational committee has now been formed and their is no requirement for an executive.

*Recommendation 2*
**The Management Committee should develop appropriate new terms of reference and should elect a Chairman and such office bearers as it considers necessary. The chair of the committee should be an agency representative.**

Mr J Paul was elected as the Chairman of the committee and Supt C Fogarty as the Deputy Chairman. It was agreed there is no need for other office bearers. The Chairman and Team Coordinator to draft the terms of reference for the committee. This matter to be considered at the next meeting.

*Recommendation 3*
**The Management Committee should maintain budget and audit responsibilities for the CISM program.**

Agreed and the arrangements are in place

*Recommendation 4*
**The Management Committee should be responsible for developing job descriptions for the Clinical Director and Team Coordinator and, in collaboration with Heads of Agencies, appoint or second people to those positions.**

These actions have been carried out noting that the Clinical Director is now retitled the Clinical Consultant.

*Recommendation 5*
**The Management Committee should develop a corporate plan for the CISM program together with performance indicators**

Agreed that the Team Coordinator with advice from the Chairman should prepare a draft 3 year corporate or strategic plan in a simplistic form for consideration by the committee.

# Annexure "A" (continued)

## Robinson Review Recommendations (as amended)

*Recommendation 6*
**The Management Committee should find suitable premises for the program which will accommodate, if possible, appropriate administrative support.**

The agency providing the Coordinator will provide the facilities

*Recommendation 7*
**The Management Committee should develop its role of advocacy for the program and examine ways of establishing better communication with Heads of Agencies and senior staff.**

The revised format of the regular operational report should meet some of this need. In addition there is a need to brief senior agency officers on an annual basis.

*Recommendation 8*
**Members of the Management Committee should be released from work to attend official committee meetings or, where they attend in their own time, be given time in lieu.**

Agreed and is now implemented.

*Recommendation 9*
**A sub-committee of the Management Committee should meet with Heads of Agencies at least once a year for information update and exchange of ideas.**

The committee to decide who should carry out the briefing and who should be in attendance. The briefing to be carried out annually and the first briefing at a time to be decided.

*Recommendation 10*
**The Management Committee to review the need for, role and composition of CISM Team Executive.**

Agreed there is no need for an executive.

# Annexure "A" (continued)

## Robinson Review Recommendations (as amended)

*Recommendation 11*
**Consideration should be given to expanding the services of the CISM program to include more intensive follow-up of individuals following debriefings or defusings (by clinicians and peers) and protocols should be developed for dealing with staff who pose an immediate risk to their own or anothers life.**

Agreed that the CISM program should only provide one follow up to individuals. Further follow ups should be through workers compensation arrangements.

*Recommendation 12*
**Priority should be given to developing education about critical incident stress and its management to team members, the field and management.**

This matter is in hand and is being addressed by the operational committee.

*Recommendation 13*
**Selection of new peers should be based on attendance at an approved CISM training program together with satisfactory performance at pre and post training assessments.**

Agreed and will be implemented.

*Recommendation 14*
**Peers and clinicians need to be reviewed on an annual basis and according to a set of criteria which takes into account regular attendance at educational updates.**

Agreed and will be implemented.

*Recommendation 15*
**Clinicians need to undertake professional supervision, educational updates and to attend special clinician meetings held on a regular basis.**

This is not a responsibility of the program and is at individual cost.

*Recommendation 16*
**An annual report should be produced which describes the activities of the program, client evaluation and finances (including audit).**

Agreed and will be implemented.

## Annexure "A" (continued)

## Robinson Review Recommendations (as amended)

*Recommendation 17*
**The backlog of evaluation data from debriefings etc should be analysed and a procedure developed to ensure regular data analysis and reporting of the results.**

Agreed. All future data will be recorded on the computer. Historical data will be retained for research when resources are available. It is possible that an Honours student may be available to carry out this task.

*Recommendation 18*
**All personnel involved in the CISM program should maintain a log of time and activities over a three-month period as a pilot, to be reviewed at the end of three months.**

This information is now provided in the regular reports to the committee.

*Recommendation 19*
**Policy documents on the CISM program should be updated and developed in line with section 6.5 of this report.**

Agreed.

*Recommendation 20*
**The multi-agency focus of the CISM program should continue**

This has been agreed.

*Recommendation 21*
**The position of Clinical Director should be part-time and the position of Team Coordinator full-time.**

The Team Coordinator is now full time and a Clinical Consultant has been appointed.

*Recommendation 22*
**Two peer team members should be released, on a quarter time basis each, to fulfil the role of Team Coordinator for a three month period 1/12/94 - 1/3/95 as an interim measure.**

This was implemented.

# Annexure "A" (continued)

## Robinson Review Recommendations (as amended)

*Recommendation 23*
**The positions of Deputy Clinical Director and Deputy Team Coordinator should be deleted. Appropriate back up support for the Clinical Director and Team Coordinator should be developed and built into their job descriptions, with allowance made for this in the job descriptions of members of the clinician pool and peer team.**

The Team Coordinator is now full time and a Clinical Consultant has been appointed.

*Recommendation 24*
**Clinicians fees shall be reviewed by the Management Committee and negotiated with clinicians.**

Implemented.

*Recommendation 25*
**Peers should be released from work or given time in lieu to attend all official CISM meetings and all training.**

Implemented.

*Recommendation 26*
**On-duty peers should be released from duty, where possible, to undertake peer work (debriefings, defusings, work-ups).**

Implemented.

*Recommendation 27*
**Agencies should, within 12 months, grant time in lieu to peers for debriefings and defusings undertaken in their own time.**

Implemented.

*Recommendation 28*
**A budget needs to be developed by the Management Committee for the remainder of the 1994/95 financial year.**

Implemented.

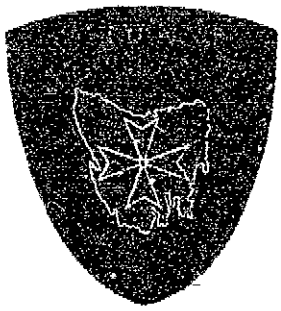
## Annexure "A" (continued)

## Robinson Review Recommendations (as amended)

*Recommendation 29*

**The CISM program should be funded on a continuing basis from a combination of Government grant and participating emergency services. Accounts for the latter should be calculated according to their workforce (paid and volunteer).**

Implemented.



Tasmanian Emergency Services

Critical Incident Stress Management Program

# The Port Arthur Incident: from a Critical Incident Stress Management Perspective

*By*
*Matthew Richman*
*Team Co-ordinator*
*January 1997*

## Acknowledgement

Exposure to trauma is an inherent part of emergency service work. The Critical Incident Stress Management Program of the Tasmanian Emergency Services was created in an attempt to mitigate the impact of trauma upon emergency service personnel. Many people have been involved in the establishment and maintenance of the Program and a great debt is owed to all those involved. It is through their efforts, commitment, and dedication that an invaluable staff support service has been provided to all emergency service personnel.

The Port Arthur incident demonstrated that staff support services are an essential part of the management of a major incident. Through the existence of the Program, appropriate support services were able to be provided. Many emergency service personnel have expressed their appreciation for the assistance given to them and the efforts of those involved in our response.

For all those involved, past and present, many thanks.

**Matthew Richman**
Team Co-ordinator

January 1997

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# Introduction

1.1. On Sunday the 28th of April 1996, a lone gunman killed thirty-five people and injured twenty-one on the Tasman Peninsula, approximately 100 kilometres south-east of Hobart, Tasmania. The majority of the deaths and injuries occurred within the Port Arthur Historic Site. The Site (formerly a penal settlement) is of great cultural and economic significance and is one of the major tourist drawcards for Tasmania. Hundreds of members of the public were in the area at the time.

1.2. Due to the enormity of the incident a large number of emergency service personnel, from all of the State's emergency services, were involved in the response.

1.3. Since 1988, the Tasmanian emergency services have had a combined approach to managing the impact of critical (or traumatic) incidents on their personnel. At that time, a critical incident stress management (CISM) program, aimed at assisting personnel to avoid or minimise the impact of traumatic incidents by helping them understand and manage their own reactions was established. The program has evolved and is now considered to be "*one of the most successful and widely respected CISM programs in Australia*" (Robinson 1994).

1.4. When the Port Arthur incident occurred, the CISM Program provided a range of staff support services aimed at enabling the emergency service personnel involved to efficiently and effectively deal with the incident and any reactions that might occur.

# Aim

2.1. The purpose of this report is to describe how the Port Arthur incident was managed from a critical incident stress management perspective and to outline the lessons that have been learnt from dealing with a major incident.

2.2. In order to achieve this, the report;

- outlines the Tasmanian Emergency Services approach to CISM
- establishes the context
- outlines the incident and its potential impact
- describes the CISM response to the incident

# 3. The Tasmanian Emergency Services CISM Program

3.1. The role of the Tasmanian Emergency Services CISM Program is to provide a comprehensive critical incident stress management program to the emergency service personnel, both permanent and volunteer, of the:-

- ***Tasmanian Ambulance Service;***
- ***Tasmania Fire Service;***
- ***Tasmania Police; and,***
- ***State Emergency Service.***

Presently there are in the vicinity of 10,000 emergency service personnel in Tasmania. The majority are volunteers with permanents accounting for approximately 18%.

3.2. The Program follows the internationally respected Mitchell model of critical incident stress management. The services provided include:-

- a range of (appropriate) interventions following a critical incident
- education and information sessions
- advice to management
- a confidential support service

(the services are expanded upon on at point 8 - "*Services Provided*").

3.3. The Program is based upon a unique peer support service and a co-operative approach between management of the services, unions, and members of the emergency services themselves.

# 4. Background - CISM Program

4.1. The Program was established in 1988 at a time when the four emergency services were combined under the Department of Police and Emergency Services (DOPES). The Program originated when interested emergency service personnel and management combined to provide a peer support service for their follow workers. DOPES was subsequently restructured and the Tasmanian Ambulance Service transferred to the Department of Community and Health Services, whilst the Tasmania Fire Service became a Commission and Tasmania Police and the State Emergency Service remained together under the Department of Police and Public Safety. Notwithstanding the restructuring, the multi-agency focus of the Program has remained due to the many benefits that accrue from having all emergency services represented under the one Program.

4.2. A central component of the Program is the Tasmanian Emergency Services Critical Incident Stress Debriefing (CISD) Team (the Team). The Team comprises emergency service personnel (peers) and mental health professionals (psychologists) who are trained in critical incident stress management.

4.3. The Team commenced operations in 1989. The number of defuses and debriefs that have been conducted by the Team is produced below:-

| Period | Defuses | Debriefs |
|---|---|---|
| 01.11.1989 - 31.12.1990 (14 months) | Not recorded | 32 |
| 01.01.1991 - 30.06.1992 (18 months) | 4 (from 24.04.1992) | 28 |
| 01.07.1992 - 30.06.1993 (12 months) | 11 | 19 |
| 01.07.1993 - 30.06.1994 (12 months) | 30 | 51 |
| 01.07.1994 - 30.06.1995 (12 months) | 42 | 52 |
| 01.07.1995 - 30.06.1996 (12 months) | 117 | 138 |

4.4. The increase in both defuses and debriefs in 1995/1996 is a result of this incident. A total of fifty-one defuses and one hundred and thirteen debriefs (group and individual) were conducted. If the Port Arthur incident is separated from the annual figures the figures are:

| Period | Defuses | Debriefs |
|---|---|---|
| 01.07.1995 - 30.06.1996 (12 months) | 66 | 25 |
| (*Port Arthur*) | 51 | 113 |

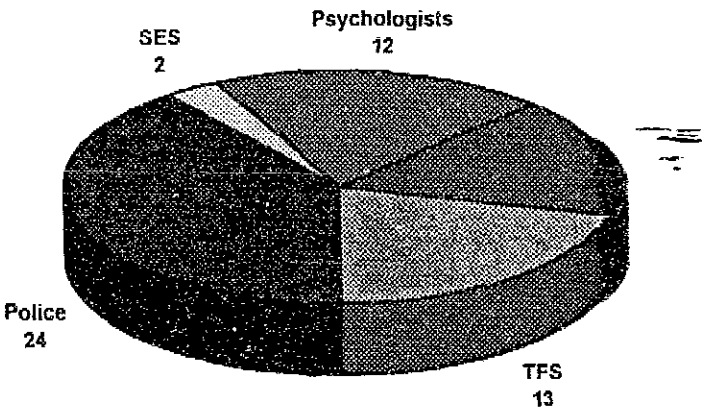
# 5. Organisational Setting

5.1. Due to its multi-agency focus, organisationally the Program transcends the boundaries of the parent Services. A Management Committee has overall responsibility for the Program and is accountable to the Services. A Team Co-ordinator has responsibility for the Program's day to day management.

## 6.2. Team Composition

**6.2.1.** Presently there are sixty-one trained Team membe[illegible] composition is:-

**Team Composition (as at 27 January [illegible]**




# 7. Protocols

**7.1.** Activation protocols are in place and are drawn from [illegible] common to all the emergency services (currently unde[illegible] policy document outlines the types of incidents in which [illegible] defusing or debriefing might be mandatory. These ty[illegible] are:

- *death or serious injury of a colleague in the line of [illegible]*
- *suicide of another officer*
- *situations that threaten the life or safety of staff*
- *any incident involving threat from firearms*
- *situations involving injury or death of children*
- *any other situation that might produce a high level [illegible] delayed emotional reaction in one or more personne[illegible]*

# 8. Services Provided

**8.1.** The services provided by the Team are:

## 8.2. Education and Information Sessions

**8.2.1** Education and Information Sessions are available upon request. The sessions concentrate on providing personnel with an understanding of:

- *what it is that amounts to a "critical" incident;*
- *critical incident stress (normalising it and strategies for dealing with it);*
- *the Tasmanian Emergency Services Critical Incident Stress Management Program;*
- *the role of the Tasmanian Emergency Services Critical Incident Stress Debriefing Team; and,*
- *the services provided.*

## 8.3. Assessment

**8.3.1** Once notified of an incident, an assessment of the level of service required is made by Team members. It involves collecting as much available information about the incident and determining the appropriate course of action.

## 8.4. Defusing and On Scene Support

**8.4.1** Defusing is a procedure that allows personnel the opportunity to acknowledge their reaction before going home or returning to duty. This may eliminate the need for a later debrief or, if one is needed, to enhance that process. On occasions it may be necessary for Team members to be "on scene" to provide immediate support or defusing. They may also (or alternatively) provide defusing at a demobilisation point or station.

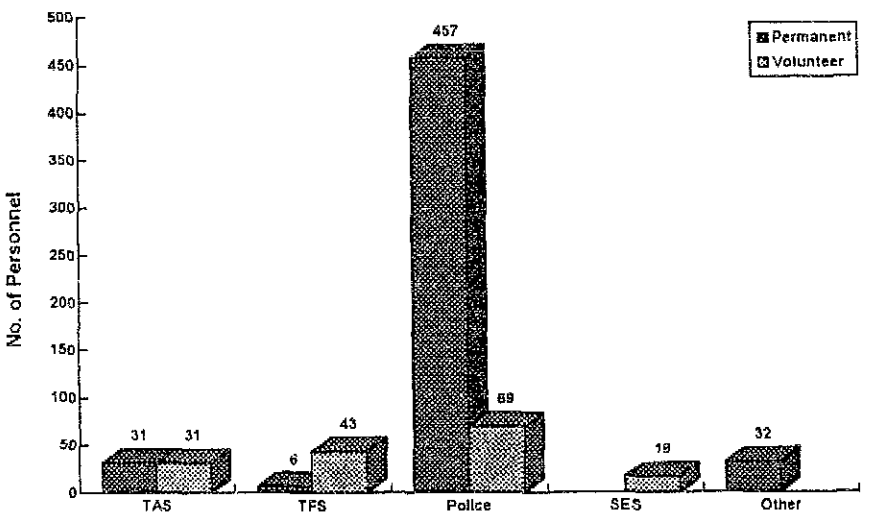
## 8.5. Group Debriefing

**8.5.1** A group debriefing would usually occur within a week (although generally between 24 - 72 hours) of the incident concluding. It is available to all emergency service personnel involved and focuses on personal reactions. It is a formal process and follows a structured format.

# 13. Emergency Service Personnel Involved

**13.1.** Due to the nature of the incident, the number of crime scenes, and the fact that it continued until the next morning as a siege situation, the number of emergency service personnel involved was high. From the available information it appears that a total of six hundred and eighty-five emergency service personnel were involved in the incident.

**13.2.** The break-up was:-




Note: Personnel classified as permanent for Tasmania Police are sworn officers. Those classified as volunteers are unsworn officers.

# 14. Potential Impact on Emergency Service Personnel

**14.1.** The experiences of each emergency service officer involved varied greatly - with no two experiencing the incident exactly the same. Whilst undoubtedly the potential existed for the incident to impact upon all emergency service personnel, the level of impact varied tremendously.

**14.2.** There were many factors that, individually and collectively had the potential to make the incident significant for the emergency service personnel that responded. They included:

- *threat to life situation*
- *whereabouts of offender not known*
- *devastation and disbelief at occurrence*
- *siege*
- *length of operation*
- *media involvement*
- *high exposure to victims*
- *extent of victim injuries*
- *victims known*
- *personalisation of the incident* - *laying of flowers at scene*
  - *next of kin at scene*
  - *large scale public memorials*
- *communication difficulties.*

**14.3.** The circle of impact (those affected by the incident) extended well beyond the bounds of the emergency service personnel attending the incident and included emergency service personnel with non-scene involvement (i.e. they did not attend Port Arthur), their families, and the community as a whole.

**17.2.3** Three Team members were then deployed to the scene and arrived at approximately 9.00 p.m. Management had requested Team members attend to assist personnel. A presence was maintained overnight with Team members locating themselves at the Youth Hostel which was being utilised by police personnel as a refreshment centre. A Team psychologist also attended the scene with a group of counsellors from the Department of Community and Health Services. Advice was provided to command staff as required.

**17.2.4** Further Team members were provided to the Police Academy which was being utilised as a demobilisation point for police.

**17.2.5** ***Day Two***
Additional Team members from the North and North Western Regions were activated. Further Team members (including a psychologist) were deployed to the scene with a direction not to expose themselves to the incident but to provide support services as required. The "scene" was inherently problematic because, as previously stated, it actually involved five major crime scenes. Whilst the preferred option would have been to have Team members at a demobilisation point, this was not possible, or indeed practical, given the circumstances.

**17.2.6** Team members were withdrawn from the Police Academy as no more police would be returning there.

**17.2.7** CISM operations management moved from the major incident room to the Southern District conference room at Police Headquarters, Hobart. This room was adjacent to the Team's normal office area.

**17.2.8** The ***initial priorities*** were:

- *to ascertain the names of all personnel involved;*
- *to provide a structured response; and*
- *to respond to urgent requests for assistance.*

**17.2.9** As some Team members had been utilised by their respective Services in their core roles it was decided to preclude them from any operational CISM duties. This included the Clinical Consultant who had been involved in the incident as police psychologist. He stood aside for the first few days but resumed involvement in his consultant capacity.

17.2.18 At this time it became apparent that assistance was required for some partners of emergency service personnel - particularly the partners of police officers. These were directed to the Police Welfare Officer and the Police Chaplain as it was felt the Team was not in a position to deal with them due to the enormity of the task. Additionally, they were outside the Team's charter.

## 17. Debriefing Phase

17.3.1 ***Day Four - Day Fourteen***

A review of the assessments that had been undertaken at the Hobart Fire Brigade revealed that it would not be possible to adhere to the work-up protocol because of the numbers involved. It was time consuming and meant a commitment of personnel that could be utilised more efficiently and effectively elsewhere.

17.3.2 It was decided that aside from some obvious cases of similar experiences, it would be appropriate to organise debriefing groups around normal work units i.e. a volunteer fire brigade, Criminal Investigation Branches, Negotiators, etc. In an endeavour to ensure that personnel with peripheral involvement (who had not been exposed and felt that they did not require debriefing) were catered for, a process of screening people out prior to the commencement of the debrief was instituted. This was undertaken by mental health professionals.

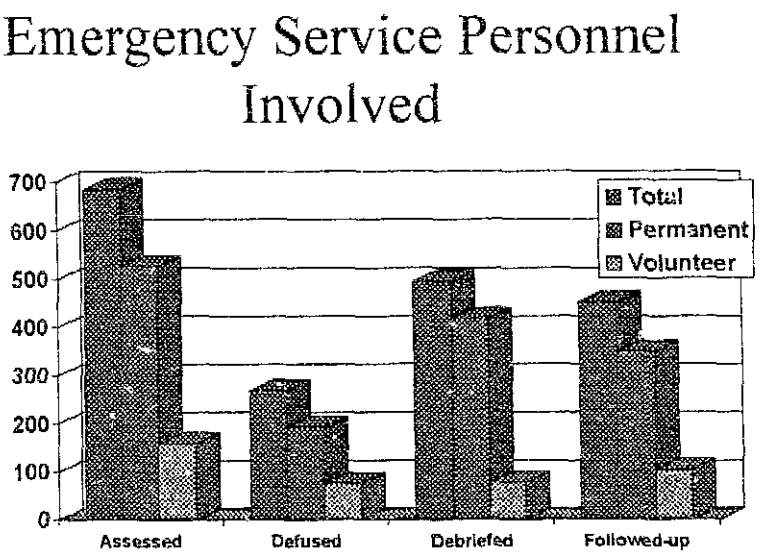
17.3.3 Groupings for debriefings became problematic when trying to establish groupings for general duties police. The problems arose because of the large numbers involved and the fact that officers from the one station could not be released en masse. Initially the strategy adopted was one of requesting managers to advise personnel of the date, time and location of the debrief programmed for them. Unfortunately, due to rosters and staffing levels, attendance at some debriefs suffered and this resulted in an inefficient utilisation of Team resources.

17.3.4 The strategy was reviewed and it was decided to re-institute the normal assessment protocol as the numbers had been reduced to a manageable level. With the implementation of this strategy, the problem of inefficient use of resources was overcome.

17.3.5 In order to ensure that there were sufficient venues to run the debriefs, a number of organisations (hospitals, etc.) were approached and they supplied rooms and catering services. This level of support from the community was indicative of the general level of support shown to the emergency services in the aftermath of Port Arthur.

## 18. Services Provided

**18.1.** As stated previously, as a result of the incident at Port Arthur, fifty-one defuses and one hundred and thirteen debriefs were conducted in a thirteen day period. The following graph demonstrates the number of personnel involved and the CISM services received.

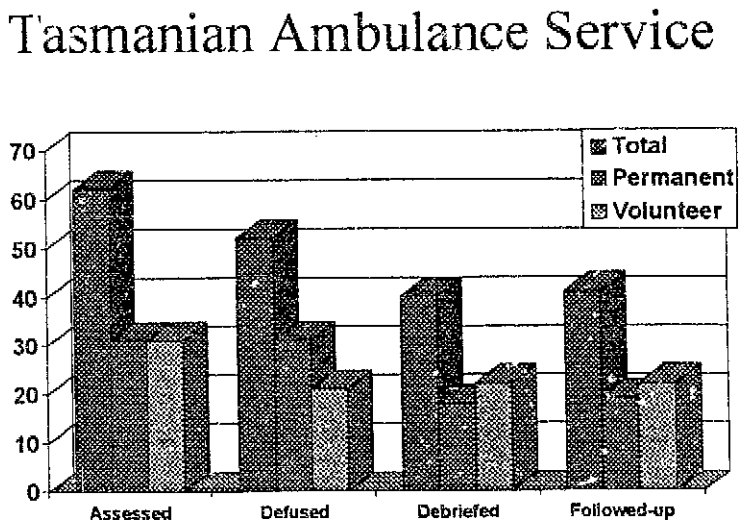


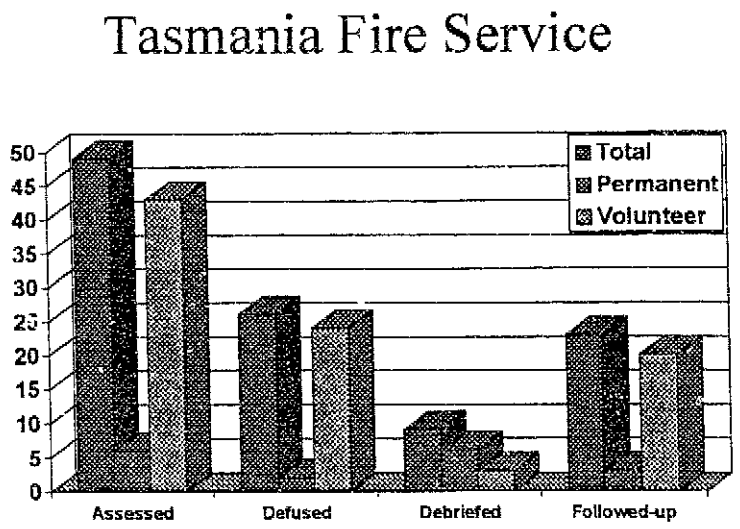

**18.2.** As can be seen, of the six hundred and eighty-five personnel involved in the incident, two hundred and sixty-nine underwent defusing, four hundred and ninety-five debriefing, and four hundred and fifty-three were followed-up.

**18.3.** The services that were provided varied according to what was considered to be appropriate at the time. Aside from the services listed above (assessed, defused, debriefed, and followed-up) other services were also provided. For instance on occasions it was considered inappropriate to have a formal defuse although it was apparent that a level of support was required. In these cases Team members were made available to the emergency service personnel in a support capacity. The support provided did not follow any formal model or structure but was nevertheless essential.

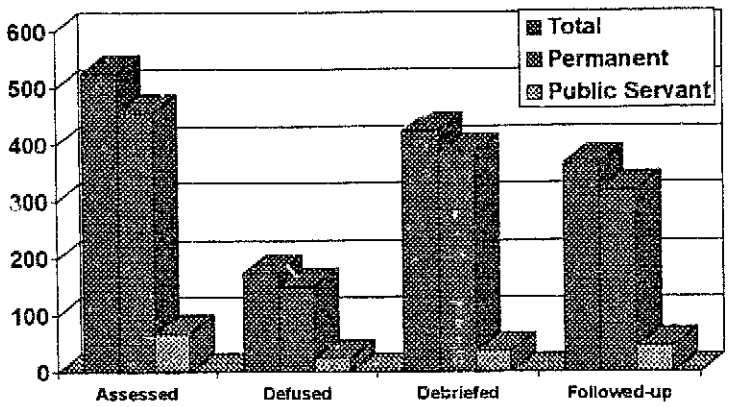
## 19. Service Provided to each Agency

19.1. The following graphs represent the services provided to each of the emergency service agencies (number of personnel receiving particular services).

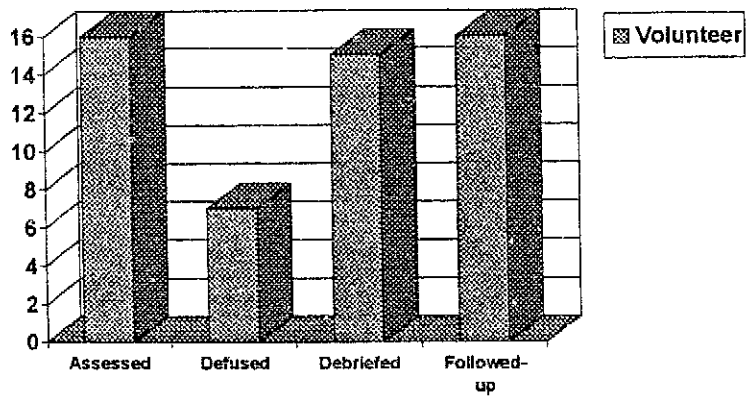


# Tasmania Police




# State Emergency Service

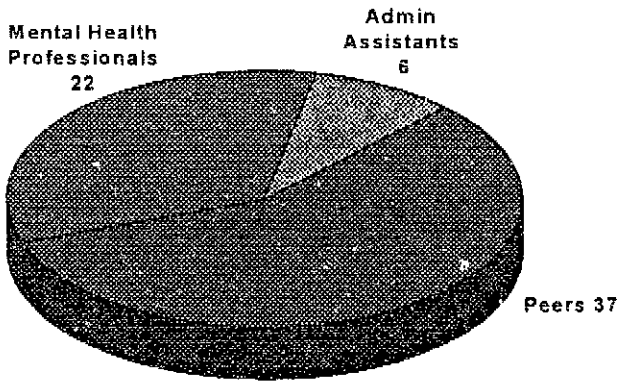


## 21. Personnel Utilised for CISM Services

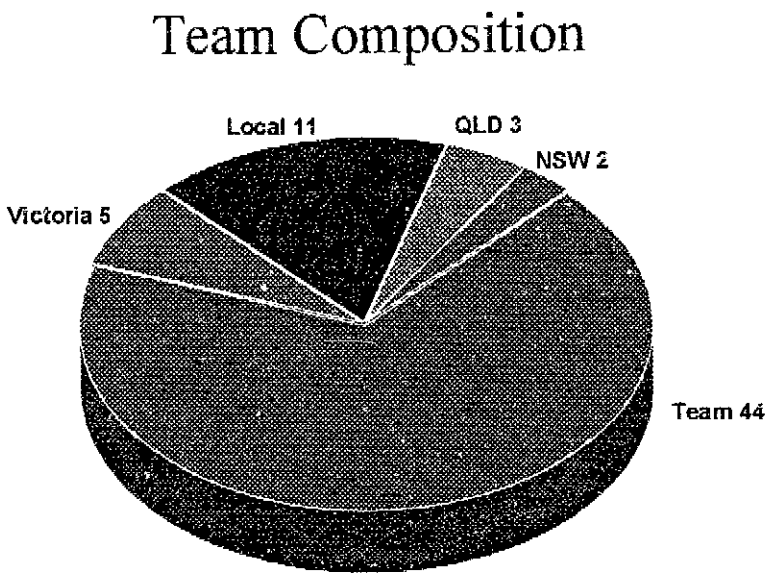
**21.1.** It was obvious that the CISM services were going to be required for an extended period of time and that the task which lay ahead of the Team was going to be difficult - not just because of the nature of the incident but also because of the large numbers of personnel involved. The Team was in a fortunate position as it had a large number of trained personnel on hand and the structures were in place to respond to the incident. Notwithstanding the number of personnel available, it became apparent that the Tasmanian Emergency Services CISD Team would require supplementing to ensure the response was as timely as possible and to allow Team members to have an opportunity to be stood down for rest and recuperation.

**21.2.** In all, sixty-five people (not including the members of the Management Committee) were utilised in the response to the incident. The break-up was:-

Personnel Utilised



**21.3.** Offers for assistance came in quickly from our mainland counterparts and several of these were taken up. The Team was also supplemented by mental health professionals from Tasmania and some ex-Team peers who were still employed by their respective emergency service.




**21.4.** The following personnel assisted in the response to the incident:-

### 21.4.1 Tasmanian Emergency Services CISD Team

**Psychologists**

*Dr. Michael Ryan*
*Dr. Jim Young*
*Christina Anderson*
*Mark Baddeley*
*Linda Burrows*
*Kathy Dunning*
*Peter Nelson*
*Helen Spinks*
*Ann Stark*
*Simon Webb*

**Tasmania Police**

*Adam Bessell*
*Leanne Brasher*
*Dale Cook*
*Chris Day*
*Jody Dennison*
*Fiona Pearce*
*Matthew Richman*
*Annabelle Scott*
*Fiona Smith*
*Phillip Summers*
*Hugh Wilson*

**State Emergency Service**

*Gary Muldoon*
*Paul Webb*

**Tasmanian Ambulance Service**

*Geoff Becker*
*Angela Hine*
*Peter James*
*Orlando Mazzone*
*Peter Mulholland*
*Pat Reardon*
*Gary Stewart*

**Tasmania Fire Service**

*Charles Blizzard*
*Larry Cullen*
*Wayne Grincias*
*Stephen Lowe*
*Graeme Newbury*
*David Peck*
*Wayne Richards*
*Garry Smith*
*Phillip Smith*

### 21.4.2 Ex-Team Members

| | |
|---|---|
| *John Richardson* | *Tasmanian Ambulance Service* |
| *David Homan* | *Tasmania Fire Service* |
| *Lee-Ann Adams* | *Tasmania Police* |

### 21.4.3 Administrative Assistance

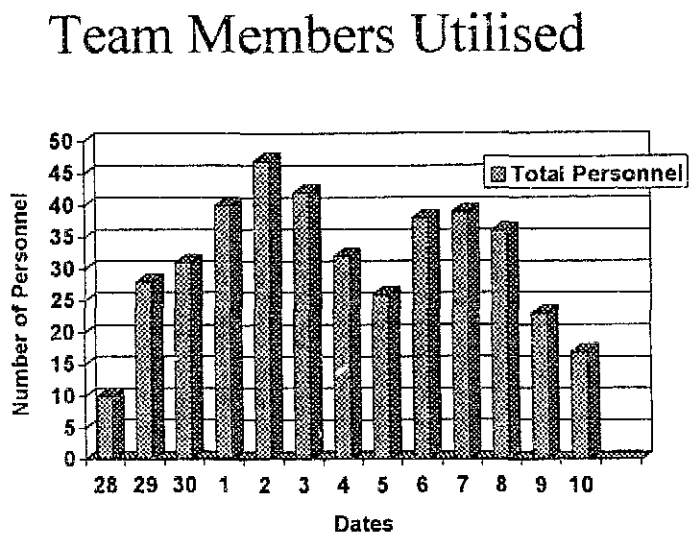
| | |
|---|---|
| *Gail Freeman* | *Tasmania Fire Service* |
| *Karina Wood* | *Tasmania Fire Service* |
| *Debra White* | *Tasmania Fire Service* |
| *Sandra Large* | *Tasmania Fire Service* |
| *Suzanne Collis* | *Tasmania Police* |
| *Naomi Pyne* | *Tasmania Police* |

### 21.4.4 External Assistance - Tasmanian

| | |
|---|---|
| *Dr. Graham Perkin*<br>*Joan Montgomery* | ***Vietnam Veterans Counselling Service***<br>*(Mental Health Professionals)* |
| *Karen Pennington-Smith* | ***Trauma Management Consultants***<br>*(Mental Health Professional)* |
| *Margie Beasley*<br>*Dr. Carey Denholm* | ***University of Tasmania***<br>*(Mental Health Professionals)* |
| *Sue Holmes* | ***Relationships Australia***<br>*(Mental Health Professional)* |
| *Chris Wilkie* | ***Family Court of Australia***<br>*(Mental Health Professional)* |

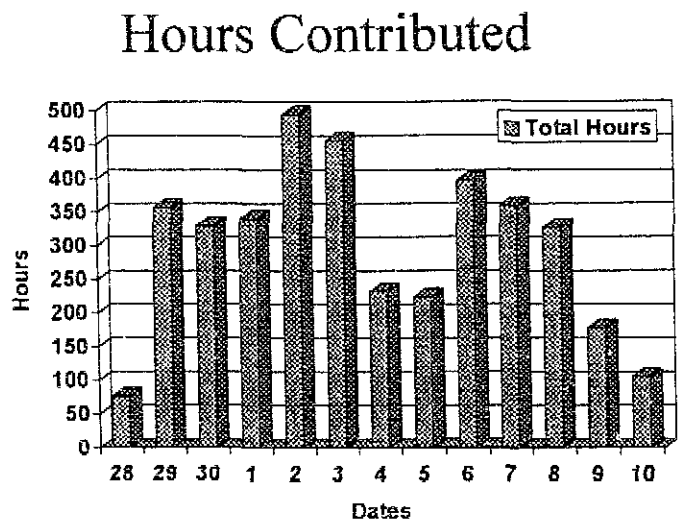
## 22. Utilisation (Day by Day)

**22.1.** The total number of personnel utilised on a day by day basis was:-




## 23. Hours Contributed

**23.1.** In the initial thirteen day period, a total of 3875.65 hours were contributed by the personnel involved. The break-up, day by day, was:-




**23.2.** No debriefs were conducted on the evening of Saturday the 4th of May, to allow the Team an opportunity for some "down time". The Team got together socially and this proved to be invaluable as it provided an excellent chance for members to step back from the intense demands placed upon them.

## 24.4. Existing Protocols and Standard Operating Procedures

**24.4.1.** There is no doubt that the existing protocols and standard operating procedures, which have been proven over time, were instrumental in enabling the Team to adapt to and deal with the huge number of personnel involved in the incident. From this perspective, it is apparent that the existing Team structure is capable of dealing with major incidents.

## 24.5. Divergence from Protocols

**24.5.1.** Whilst the nature of the incident, the scenes, and the criminal investigation, required a great deal of flexibility in the response provided, it is imperative that (notwithstanding the need to be able to adapt to the situation) the role and area of responsibility of a support service are kept in mind and any departure from normal protocols only be undertaken wisely. Further, it is important to be aware that such a departure establishes a precedent and one must be conscious of the potential ramifications of such a course of action (i.e. extending the service to personnel not normally within the Team's charter might infer that they will be covered in any future incidents).

## 24.6. CISM Operations Room

**24.6.1.** As police were the major players in the incident (in terms of the number of personnel involved - five hundred and twenty-six of the six hundred 'and eighty-five were from Tasmania Police), it was appropriate to conduct CISM operations from police premises. Were another agency to be the major player (i.e. in the case of major bush fires the Tasmania Fire Service would utilise more personnel) it would perhaps be appropriate to function from their premises. The advantages of operating in close proximity to the majority of the personnel involved are many and varied, but include; being conveniently located for "drop ins"; and, being able to maintain strong informal communications with personnel involved.

## 24.7. Resources

**24.7.1.** Also instrumental in the success of the response was the resources available to the Team. In a time of immense demand the task was made significantly easier by having ready access to a range of essential resources (i.e. motor vehicles, computers, and administrative assistants).

## 24.8. Information Management System

24.8.1. A comprehensive information management system is vital to the management of incidents of this nature. The system should be designed to enable the smooth management of a major incident from a staff support perspective. The ability to record information and extract it as required is essential for the efficient and effective management of a major incident. In this incident, an information management system was designed on the run, and on occasions it became necessary to backtrack and add further information or alternatively information was entered that was not required. Through this experience, it has been ascertained exactly what is required to manage major incidents. Finalising the design of the information management system is presently being undertaken.

## 24.9. Maintenance of Accurate Records

24.9.1. Following on from the previous section, and perhaps stating the obvious, it is essential that accurate records are maintained. The types of records maintained for this incident included:

- *a daily log book,*
- *a list of personnel involved in the incident*
- *the level of service provided to personnel*
- *logistical records (relating to Team personnel, administration, etc.).*

24.9.2. ***Log Book***
The log book was reviewed first thing each morning and any matters not completed the previous day were listed for completion (it was also reviewed intermittently throughout the day).

24.9.3. ***Personnel List and Level of Service Provided***
Without the list of personnel and recording the level of service provided, it would have been impossible to manage the delivery of services due to the large number involved (the list is held in confidence by the Team). This list was utilised extensively in planning debrief groupings which were based on the information we had about the roles of the emergency service personnel involved.

24.9.4. ***Logistical Records***
These records covered areas such as; vehicle allocation, accommodation, rostered hours, financial expenditure, venues, normal Team reports, etc.

## 24.10. Regular Team Briefings

24.10.1 Regular briefings were held at both the management and Team level. This ensured a free flow of information and ensured that all personnel were kept informed.

## 24.11 Team Welfare

24.11.1 Team welfare was of vital importance. Whilst it was not possible to provide extensive debriefing of Team members during the incident, a great deal of effort was put in to providing them with as much support as possible. It was recognised that the task facing the Team was significant and the measures of informal debriefings, coupled with an opportunity for one on one counselling, were aimed at providing this support.

24.11.2 Having all personnel involved in the CISM response followed up at the conclusion of the debriefing phase was also important. Because the debriefing teams changed throughout the incident (due to rostering, etc.) it was not possible to run group debriefings (except for the mainland teams) for Team members so the follow-up was particularly important.

## 24.12 Senior Management Support and Support from Other Agencies

24.12.1 Heads of agencies and senior executives took an active role in supporting the Team's endeavours (i.e. by attending the CISM Operations Centre) and this was significant in terms of providing Team members with an indication that their efforts were valued. Management was also very supportive in releasing CISM personnel from core role functions to assist in the response.

## 24.13 Credentials of Personnel Assisting

24.13.1 Reverting to outside assistance was necessary on this occasion and the Team were indeed grateful for the many offers to assist and the assistance received. Importantly, prior to the incident Team members had met a number of other emergency service staff support personnel at national conferences. When the offers of assistance were made, it was reassuring to know either the personnel involved or the credentials of the Program's they represented.

## 24.14. Changing Roles of Emergency Service Personnel

24.14.1 It is also important to be mindful of the fact that the roles of emergency service personnel might change during the course of an incident and it therefore might not be appropriate to provide a service to them at that particular point in time (i.e. a negotiator might subsequently be utilised for disaster victim identification). It is therefore important to ascertain the current status of the personnel in relation to the incident.

## 24.15. Close Liaison With Other Support Service Providers

24.15.1 It is important to ensure that a close liaison is maintained with similar services being provided to a different client base as it is important to be aware of the direction that all parties are going.

# 25. Conclusion

25.1. The Port Arthur incident demonstrated that it is essential to have a support service in place to deal with major incidents that involve a large number of personnel. The impact on the personnel involved varied tremendously and it is not the purpose of this paper to expand upon the individual's reactions. Suffice to say that the reactions ranged from severe to negligible.

25.2. Had the CISM Program not been in place and had the systems and structures not been developed to the extent that they had, there is little doubt that the provision of support (a duty of care for the emergency services) would have been immensely problematic. Just attempting to put together a concerted and co-ordinated (let alone quality) response for those who required immediate assistance would have been almost impossible. Having a Team (and access to others experienced in dealing with emergency service personnel) trained, practised, and experienced in the various areas of critical incident stress management - as it relates to emergency service personnel - was of great benefit. This, together with the fact that the mental health professionals utilised were heavily experienced practitioners, skilled in the field of trauma, and the peers were experienced emergency service personnel trained in CISM, meant that the support services could be implemented immediately.

## Acronyms

| | |
|---|---|
| *CISD* | *Critical Incident Stress Debriefing* |
| *CISM* | *Critical Incident Stress Management* |
| *DOPES* | *Department of Police and Emergency Services* |
| *TAS* | *Tasmanian Ambulance Service* |
| *TFS* | *Tasmania Fire Service* |
| *SES* | *State Emergency Service* |

## References

1. Australian Bureau of Statistics, *1996 Tasmanian Year Book.*

2. Robinson, Dr. R, *Review of the Tasmanian Emergency Services CISM Program,* 1994.

3. Tasmanian Emergency Services CISM Program, *Background and History*, 1996.

4. Tasmanian Emergency Services CISM Program Annual Report 1995/1996.

5. Tasmanian Emergency Services CISM Program Pamphlet.

## Venue Providers

The following organisations provided venues for the Team during the incident. Their assistance was invaluable and greatly appreciated.

- *Calvary Hospital*
- *Church Hall, Nubeena*
- *Clarence City Council*
- *Glenorchy City Council*
- *Hobart City Council*
- *Local Government Association*
- *Police Association of Tasmania*
- *Relationships Australia*
- *St Helens Hospital*
- *St Johns Hospital*
- *Tasmania Fire Service*
- *Tasmania Police*
- *Tasmanian Ambulance Service*
- *State Emergency Service*
- *Vietnam Veterans Counselling Service*

# The Tasmanian Emergency Services Critical Incident Stress Management Program

# 1995/1996 ANNUAL REPORT

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| 5. | Critical Incidents | *Pages* | *9 - 11* |
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| 6. | Summary of Team Activations | *Pages* | *12 - 13* |

| | | | |
|---|---|---|---|
| 7. | Team Activations (by Service) | *Pages* | *13 - 15* |
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| 8. | Utilisation Comparison | *Pages* | *15 - 17* |
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| 10. | Evaluation Reports | *Pages* | *18 - 23* |
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| 11. | Education | *Page* | *24* |
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| 17. | Evaluation Database | *Page* | *25* |
| 18. | Conclusion | *Page* | *26* |

Attachment: - Current issue pamphlet

# 1. Aim

1.1. The aim of the Tasmanian Emergency Services Critical Incident Stress Management Program is to assist emergency service personnel avoid or minimise the impact of "critical" or traumatic incidents.

# 2. Background

2.1. The welfare of emergency service personnel has long been recognised as being essential to the maintenance of efficient and effective emergency service agencies.

2.2. The Tasmanian Emergency Services Critical Incident Stress Management (CISM) Program was established to assist the psychological well-being of emergency service personnel. The Program follows an internationally respected CISM model. An important component of the Program is the Tasmanian Emergency Services Critical Incident Stress Debriefing (CISD) Team. The Team, which was formed in 1988, has a multi-agency focus. It serves the:

- ***Tasmanian Ambulance Service***
- ***Tasmania Fire Service***
- ***Tasmania Police***
- ***State Emergency Service***

2.3. The Team provides a unique peer support service based on a co-operative approach between management of the services, unions and emergency service personnel.

2.4. The multi-agency approach enables (where appropriate) members of all the emergency services, who work side by side at the scene, to come together as a group for defusing or debriefing purposes. This has led to closer relationships between the Services and has engendered an *esprit de corp* which positively impacts upon the delivery of services to the wider community.

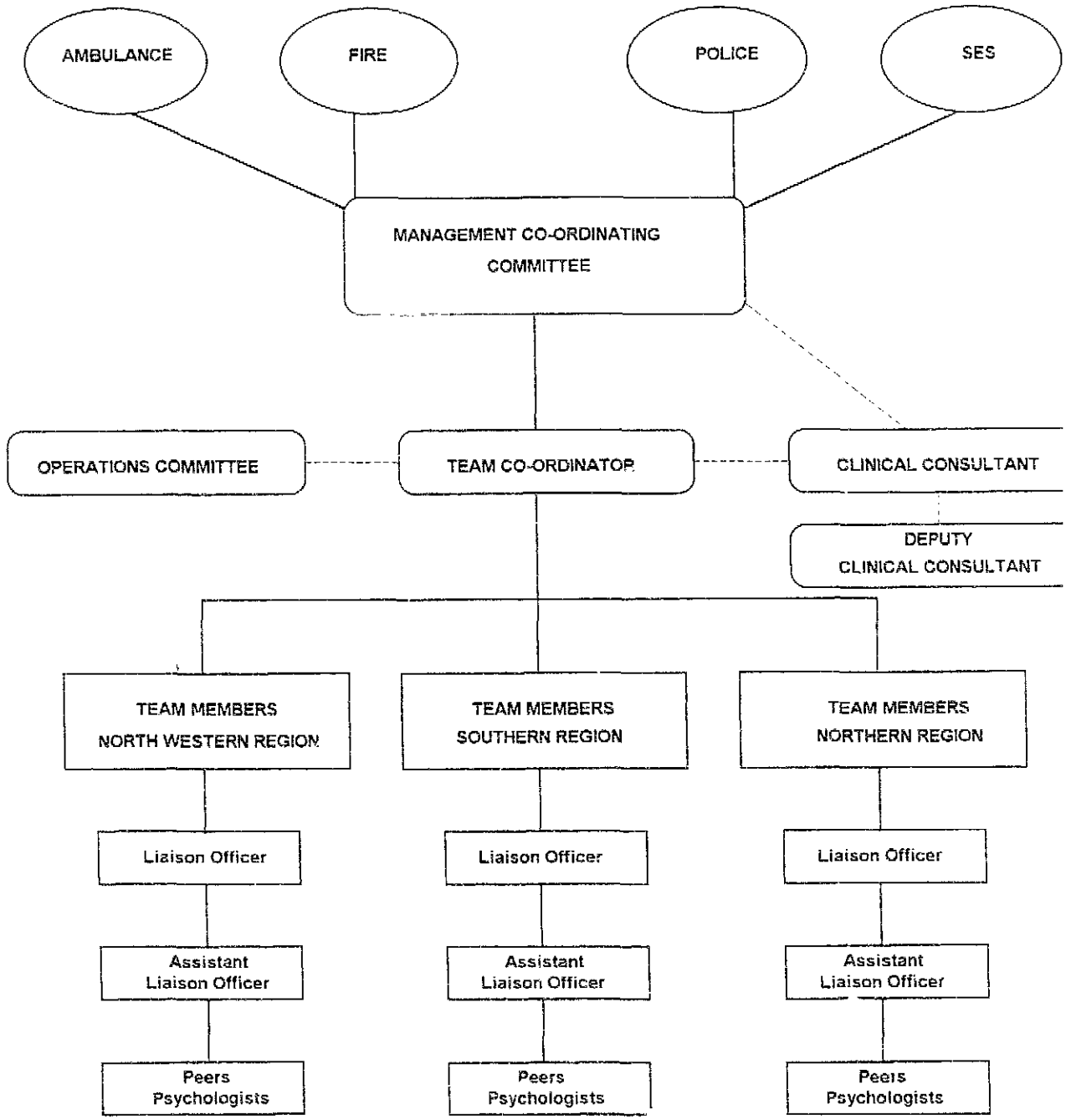
2.5. The Team serves the (approximately) ten thousand emergency service personnel, both permanent and volunteer, who work within Tasmania.

2.6. The Team is able to provide a state-wide response twenty four hours a day, seven days a week.

# 3. Team Profile

## 3.1. Team Structure

3.1.1 The existing Team structure is:



## 3.2. Management Co-ordinating Committee

**3.2.1** The Management Co-ordinating Committee is made up of representatives of the heads of the Services, Union and Association representatives, the Clinical Consultant, the Team Co-ordinator and a Team representative. It is responsible for the overall management of the program.

**3.2.2** The members of the 1995/1996 Management Co-ordinating Committee were:

| | |
|---|---|
| *Mr Joe Paul (Chairman)* | *State Emergency Service* |
| *Mr Colin Fogarty* | *Tasmania Police (retired 20.09.1995)* |
| *Mr David Paton* | *Tasmania Police* |
| *Mr David McKeand* | *State Emergency Service* |
| *Mr Ted Preshaw* | *Tasmanian Ambulance Service* |
| *Mr Peter Alexander* | *Tasmania Fire Service* |
| *Mr Mark Kadziolka* | *Police Association of Tasmania* |
| *Mr Wayne Richards* | *United Fire-fighters Union* |
| *Mr Geoff Becker* | *Ambulance Employees Association* |
| *Dr Mike Ryan* | *Clinical Consultant* |
| *Mr John Spaulding* | *Team Representative* |
| *Mr Matthew Richman* | *Team Co-ordinator* |

## 3.3. Operations Committee

**3.3.1** The Operations Committee determines the training needs and educational objectives of the Team. Operational issues are also considered by this Committee. The 1995/1996 members were:

| | |
|---|---|
| *Dr Mike Ryan* | *Clinical Consultant* |
| *Dr Jim Young* | *Psychologist Representative* |
| *Mr Chris Day* | *North Western Region Liaison Officer* |
| *Mr David Peck* | *Northern Region Liaison Officer* |
| *Mr Charles Blizzard* | *Southern Region Liaison Officer* |
| *Mr Matthew Richman* | *Team Co-ordinator* |

## 3.4. Clinical Consultant

**3.4.1** The position of Clinical Consultant was held by Dr Michael Ryan (the Tasmania Police Psychologist).

## 3.5. Deputy Clinical Consultant

**3.5.1** The position of Deputy Clinical Consultant was reinstated in May 1996. Dr Jim Young (a privately practising psychologist) holds the position.

## 3.6. Team Co-ordinator

**3.6.1** The full-time position of Team Co-ordinator presently rests with Tasmania Police. The position will rotate to the Tasmania Fire Service at the end of February 1997. From this time the position will rotate amongst the Tasmania Fire Service, the Tasmanian Ambulance Service and Tasmania Police on a twelve monthly basis. The State Emergency Service covers periods of leave. Costs associated with the position are met by the Service providing the Co-ordinator.

**3.6.2** The position is currently held by Matthew Richman.

## 3.7. Liaison Officers and Assistant Liaison Officers

**3.7.1** The Team is divided into three geographic regions. Each region has a Liaison Officer and an Assistant Liaison Officer(s) who act as regional co-ordinators. The positions are filled annually by nominations from within the Team. Personnel who held the positions during the year were:

***Liaison Officer(s)***

| | |
|---|---|
| *Chris Day* | *North Western Region* |
| *David Peck* | *Northern Region* |
| *Charles Blizzard* | *Southern Region* |

***Assistant Liaison Officer(s)***

| | |
|---|---|
| *Jody Dennison* | *North Western Region* |
| *Phillip Summers* | *Northern Region (until 26.03.1996)* |
| *Angela Hine (joint)* | *Northern Region (from 26.03.1996)* |
| *Peter James (joint)* | *Northern Region (from 26.03.1996)* |
| *Graham Newbury* | *Southern Region (until 26.03.1996)* |
| *Garry Muldoon* | *Southern Region (from 26.03.1996)* |

## 3.8. Peers and Psychologists

3.8.1 The Team proper is made up of emergency service personnel (peers) and mental health professionals (psychologists). The peers are drawn from within the agencies and undergo an extensive selection process. The psychologists are drawn from both the public and private sector and are utilised on a "user pays" basis. The current Team (Service by Service) is:

### 3.8.2 Tasmanian Ambulance Service

| *Name* | | *CISD Region* |
|---|---|---|
| *1. Geoff* | *Becker* | *North Western* |
| *2. Gary* | *Stewart* | *North Western* |
| *3. Angela* | *Hine* | *Northern* |
| *4. Peter* | *James* | *Northern* |
| *5. Peter* | *Mulholland* | *Northern* |
| *6. Steven* | *Lang* | *Southern* |
| *7. Orlando* | *Mazzone* | *Southern* |
| *8. Pat* | *Reardon* | *Southern* |
| *9. Peter* | *Stride* | *Southern* |

### 3.8.3 Tasmania Fire Service

| *Name* | | *CISD Region* |
|---|---|---|
| *1. Wayne* | *Richards* | *North Western* |
| *2. Garry* | *Smith* | *North Western* |
| *3. Larry* | *Cullen* | *Northern* |
| *4. Stephen* | *Lowe* | *Northern* |
| *5. David* | *Peck* | *Northern* |
| *6. Charles* | *Blizzard* | *Southern* |
| *7. Wayne* | *Grincais* | *Southern* |
| *8. Graeme* | *Newbury* | *Southern* |
| *9. Phillip* | *Smith* | *Southern* |

### 3.8.4 Tasmania Police

| *Name* | | *CISD Region* |
|---|---|---|
| *1. Graham* | *Baly* | *North Western* |
| *2. Chris* | *Day* | *North Western* |
| *3. Jody* | *Dennison* | *North Western* |
| *4. Fiona* | *Pearce* | *North Western* |
| *5. Kay* | *Wells* | *North Western* |
| *6. Hugh* | *Wilson* | *North Western* |
| *7. Leanne* | *Brasher* | *Northern* |
| *8. Dale* | *Cook* | *Northern* |
| *9. Annabelle* | *Shegog* | *Northern* |
| *10. Fiona* | *Smith* | *Northern* |
| *11. Phillip* | *Summers* | *Northern* |
| *12. Adam* | *Bessell* | *Southern* |
| *13. Debbie* | *May* | *Southern* |
| *14. John* | *McCormack* | *Southern* |
| *15. Matthew* | *Richman* | *Southern* |
| *16. John* | *Spaulding* | *Southern* |

### 3.8.5 State Emergency Service

| *Name* | | *CISD Region* |
|---|---|---|
| *1. Paul* | *Webb* | *North Western* |
| *2. Gary* | *Muldoon* | *Southern* |

### 3.8.6 Psychologists

| *Name* | | *CISD Region* |
|---|---|---|
| *1. Christina* | *Anderson* | *North Western* |
| *2. Helen* | *Spinks* | *North Western* |
| *3. Mark* | *Baddeley* | *Northern* |
| *4. Kathy* | *Dunning* | *Northern* |
| *5. Linda* | *Burrows* | *Southern* |
| *6. Joan* | *Montgomery* | *Southern* |
| *7. Peter* | *Nelson* | *Southern* |
| *8. Dr Graham* | *Perkin* | *Southern* |
| *9. Dr Michael* | *Ryan* | *Southern* |
| *10. Ann* | *Stark* | *Southern* |
| *11. Simon* | *Webb* | *Southern* |
| *12. Dr Jim* | *Young* | *Southern* |

## 3.9. Resignations

**3.9.1** During the year several Team members resigned from the Team. They were:

| *Name* | | *CISD Region* | *Service* |
|---|---|---|---|
| *1. John* | *Richardson* | *North Western* | *TAS* |
| *2. David* | *Homan* | *North Western* | *TFS* |
| *3. Peter* | *Dart* | *Southern* | *TFS* |
| *4. John* | *Shea* | *Northern* | *Police* |
| *5. Phillip* | *Ling* | *Southern* | *Police* |
| *6. Mark* | *Maumill* | *Southern* | *Police* |
| *7. Paul* | *Reynolds* | *Southern* | *Police* |

## 3.10. Team Composition

**3.10.1** The Team composition is currently:

| CISD Region | TAS | TFS | Police | SES | Sub-Total | Psychologists | Total |
|---|---|---|---|---|---|---|---|
| Southern | 4 | 4 | 5 | 1 | 14 | 8 | 22 |
| Northern | 3 | 3 | 5 | 0 | 11 | 2 | 13 |
| North Western | 2 | 2 | 6 | 1 | 11 | 2 | 13 |
| Total | 9 | 9 | 16 | 2 | 36 | 12 | 48 |

## 3.11. Recruitment

**3.11.1** Whilst no additional personnel were recruited to the Team during the year as at the 30th of June there are twenty applicants. Appointments will be finalised by the end of August 1996.

## 3.12. Training

**3.12.1** The Team held a basic training course in July 1995, a two day training in September, and single training days in December, March, and June.

**3.12.2** The training aimed to increase skill levels relative to critical incident stress management and related areas.

# 4. Services Provided

4.1. The services provided by the Team are:

## 4.2. Education and Information Sessions

4.2.1 Education and Information Sessions are available upon request. The sessions concentrate on providing personnel with an understanding of:

- *what it is that amounts to a "critical" incident*
- *critical incident stress (normalising it and strategies for dealing with it)*
- *the Tasmanian Emergency Services Critical Incident Stress Management Program*
- *the role of the Tasmanian Emergency Services Critical Incident Stress Debriefing Team*
- *the services provided*

## 4.3. Assessment

4.3.1 Once notified of an incident, an assessment of the level of service required is made by Team members. It involves collecting as much available information about the incident and determining the appropriate course of action.

## 4.4. Defusing and On Scene Support

4.4.1 Defusing is a procedure which allows personnel the opportunity to acknowledge their reaction before going home or returning to duty. This may eliminate the need for a later debrief or, if one is needed, to enhance that process. On occasions it may be necessary for Team members to be "on scene" to provide immediate support or defusing. They may also (or alternatively) provide defusing at a demobilisation point or station.

## 4.5. Group Debriefing

4.5.1 A group debriefing would usually occur within a week (although generally between 24 - 72 hours) of the incident concluding. It is available to all emergency service personnel involved and focuses on personal reactions. It is a formal process and follows a structured format.

## 4.6. Individual Debriefing

**4.6.1** Debriefing for individuals is also available and is provided when appropriate.

## 4.7. Follow-up Assistance

**4.7.1** Follow-up assistance, in the form of a courtesy phone call, a consultation with a Team psychologist or other contact with a Team member is also available.

## 4.8. Advice to Partners, Family and Friends

**4.8.1** Advice and information is available upon request to partners, family and friends of emergency service personnel involved in critical incidents.

## 4.9. Advice to Management

**4.9.1** The Team also provides advice to management on issues surrounding attendance at critical incidents (e.g. limiting the exposure of personnel to the scene).

# 5. Critical Incidents

**5.1.** The critical incidents that the Team responded to included:

- *the death of emergency service personnel*
- *emergency service personnel being fired upon*
- *threat to life situations*
- *murders*
- *suicides*
- *the death of children*
- *multiple fatal motor vehicle accidents*
- *the Port Arthur incident*
- *fatal fires*
- *sieges*
- *assaults upon emergency service personnel*
- *blood and body fluid exposures*
- *plane crash*
- *incidents resulting in gruesome injuries*
- *fatal motor vehicle accidents*

## 5.2. The Port Arthur Incident

5.2.1 The Port Arthur incident, which occurred on the 28th of April, required a significant response from the Team. Thirty five people were killed and nineteen injured when a lone gunman entered the Port Arthur historic site and surrounding area. The situation developed into a siege which lasted until the next morning. The incident concluded with the successful capture of the gunman.

5.2.2 There were many features about this incident which made it significant for the emergency service personnel that responded. These included:

- *threat to life situation*
- *whereabouts of the offender not known*
- *devastation and disbelief at the occurrence*
- *siege*
- *length of operation*
- *media involvement*
- *high exposure to victims*
- *gruesome injuries*
- *victims known*
- *personalisation of the incident*

5.2.3 On the available information it appears that six hundred and eighty five emergency service personnel were involved in the incident. All of these were assessed. Two hundred and sixty nine were defused and four hundred and ninety five were debriefed. Four hundred and fifty three were followed-up (some of these follow-ups are still continuing). A significant amount of peer support was also provided.

| Intervention | Permanent | Volunteer | Total |
|---|---|---|---|
| *Assessed* | 526 | 159 | 685 |
| *Defused* | 193 | 76 | 269 |
| *Debriefed* | 418 | 77 | 495 |
| *Followed-up* | 349 | 104 | 453 |

5.2.4 The Team response was immediate and intense. Assistance was sought and obtained locally and from interstate. In the initial two week period a total of 3875.65 hours were contributed by sixty five personnel.

5.2.5 The personnel involved with the Team's response were drawn from the following areas:

| **Tasmanian Emergency Services CISD Team** | Peer(s) | Psych(s) |
|---|---|---|
| *Tasmania Police* | 12 | |
| *Tasmania Fire Service* | 10 | |
| *Tasmanian Ambulance Service* | 8 | |
| *State Emergency Service* | 2 | |
| *Team Psychologists* | | 10 |

| **External Assistance** | Peer(s) | Mental Health Professional(s) |
|---|---|---|
| *Vietnam Veterans Counselling Service* | | |
| • *Psychologists* | | 2 |
| *Trauma Management Consultants* | | |
| • *Counsellor* | | 1 |
| *University of Tasmania* | | |
| • *Psychologists* | | 2 |
| *Relationships Australia* | | |
| • *Psychologist* | | 1 |
| *Family Court of Australia* | | |
| • *Counsellor* | | 1 |
| *Australian Graduate School of Police Management* | | |
| *Charles Sturt University* | | |
| • *Psychologist* | | 1 |
| *New South Wales Police Service* | | |
| • *Psychologist* | | 1 |
| *Victorian Ambulance Crisis Counselling Unit* | | |
| • *Psychologist* | | 2 |
| • *Ambulance Officers* | 3 | |
| *Queensland Ambulance Service* | | |
| • *Counsellor* | | 1 |
| • *Ambulance Officers* | 2 | |
| **Total:** | **37** | **22** |

| **Administrative Assistance** | |
|---|---|
| *Tasmania Police* | **2** |
| *Tasmania Fire Service* | **4** |
| **Total:** | **6** |

5.2.6 Whilst intensely demanding this incident demonstrated that the Team is able to respond to "disasters" of this nature (a separate report is to be prepared in relation to this incident).

# 6. Summary of Team Activations

6.1. The Team was notified of, and enquired into, one hundred and fifteen potential critical incidents. A total of one thousand six hundred and fifty two personnel were assessed.

6.2. The activity statistics are as follows:

| Intervention | Permanent | Volunteer | Total |
|---|---|---|---|
| *Assessed* | 1260 | 392 | **1652** |
| *Defused* | 360 | 161 | **521** |
| *Debriefed* | 537 | 131 | **668** |
| *Followed-up* | 430 | 133 | **563** |

- *Defuses:*

  Defuses were held for forty one of the incidents; twelve of these incidents also had debriefs. A total of one hundred and seventeen defuses were conducted.

- *Debriefs:*

  Debriefs were held for twenty four of the incidents. A total of one hundred and thirty eight debriefs were held (this includes individual and group debriefs).

6.3. The number of defuses and debriefs that were conducted during the year are significantly up on those of previous years. The comparisons are:

| Period | Defuses | Debriefs |
|---|---|---|
| 01.11.1989 - 31.12.1990 (14 months) | Not recorded | 32 |
| 01.01.1991 - 30.06.1992 (18 months) | 4 (from 24.04.1992) | 28 |
| 01.07.1992 - 30.06.1993 (12 months) | 11 | 19 |
| 01.07.1993 - 30.06.1994 (12 months) | 30 | 51 |
| 01.07.1994 - 30.06.1995 (12 months) | 42 | 52 |
| 01.07.1995 - 30.06.1996 (12 months) | 117 | 138 |

6.4. The increase can be attributed to the Port Arthur incident (refer 5.2.) in which fifty one defuses and one hundred and thirteen debriefs were conducted. If the Port Arthur incident is excluded the figures are:

| Period | Defuses | Debriefs |
|---|---|---|
| 01.07.1995 - 30.06.1996 (12 months) | 66 | 25 |

6.5. Compared to last years figures (and not including the Port Arthur Incident), there was an increase in notifications of thirty five, an increase in defuses of twenty two and a decrease in debriefs of twenty seven. The figures are consistent with the model and attest to the appropriateness of the early intervention approach.

# 7. Team Activations (by Service)

## 7.1 Tasmanian Ambulance Service

7.1.1 The Team responded to fifty incidents involving personnel from the Tasmanian Ambulance Service. A total of two hundred and sixty five personnel were assessed.

| Intervention | Permanent | Volunteer | Total |
|---|---|---|---|
| *Assessed* | 170 | 95 | 265 |
| *Defused* | 62 | 34 | 96 |
| *Debriefed* | 47 | 35 | 82 |
| *Followed-up* | 37 | 28 | 65 |

7.1.2 Twenty three defuses and twenty debriefs were held. Of these, two defuses and eight debriefs were conducted jointly with another service (or services).

## 7.2. Tasmania Fire Service

7.2.1 The Team responded to thirty four incidents involving personnel from the Tasmania Fire Service. A total of two hundred and thirty seven personnel were assessed.

| Intervention | Permanent | Volunteer | Total |
|---|---|---|---|
| *Assessed* | 72 | 165 | 237 |
| *Defused* | 26 | 72 | 98 |
| *Debriefed* | 7 | 31 | 38 |
| *Followed-up* | 3 | 30 | 33 |

7.2.2 Fourteen defuses and ten debriefs were held. Of these, two defuses and three debriefs were conducted jointly with another service (or services).

## 7.3. Tasmania Police

7.3.1 The Team responded to ninety incidents involving personnel from Tasmania Police. A total of one thousand and seventy five personnel were assessed.

| Intervention | Permanent | Volunteer | Total |
|---|---|---|---|
| *Assessed* | 986 | 89 | 1075 |
| *Defused* | 263 | 43 | 306 |
| *Debriefed* | 475 | 38 | 513 |
| *Followed-up* | 383 | 56 | 439 |

Note: In this instance "volunteers" includes State Servants.

7.3.2 Seventy four defuses and one hundred and fourteen debriefs were held. Of these, three defuses and nine debriefs were conducted jointly with another service (or services).

## 7.4. State Emergency Service

7.4.1 The Team responded to nine incidents involving personnel from the State Emergency Service. A total of forty three personnel were assessed.

| Intervention | Permanent | Volunteer | Total |
|---|---|---|---|
| *Assessed* | 0 | 43 | 43 |
| *Defused* | 0 | 12 | 12 |
| *Debriefed* | 0 | 27 | 27 |
| *Followed-up* | 0 | 19 | 19 |

7.4.2 Six defuses and six debriefs were held. Of these, one defuse and three debriefs were conducted jointly with another service (or services).

### 7.5. "Others"

7.5.1 The significance of the Port Arthur incident required a degree of flexibility in the Team's response. To this end a number of personnel not directly employed by the State's emergency services (and therefore not normally covered by the Team) were catered for.

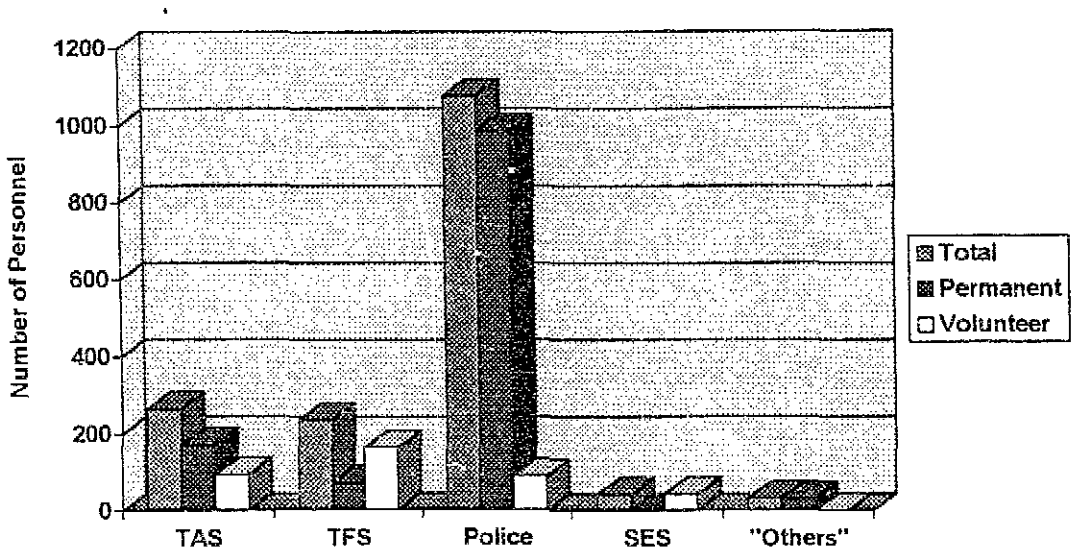
| Intervention | Permanent | Volunteer | Total |
|---|---|---|---|
| *Assessed* | 32 | 0 | 32 |
| *Defused* | 9 | 0 | 9 |
| *Debriefed* | 8 | 0 | 8 |
| *Followed-up* | 7 | 0 | 7 |

7.5.2 Three debriefs were conducted for "others" - two in conjunction with one of the services.

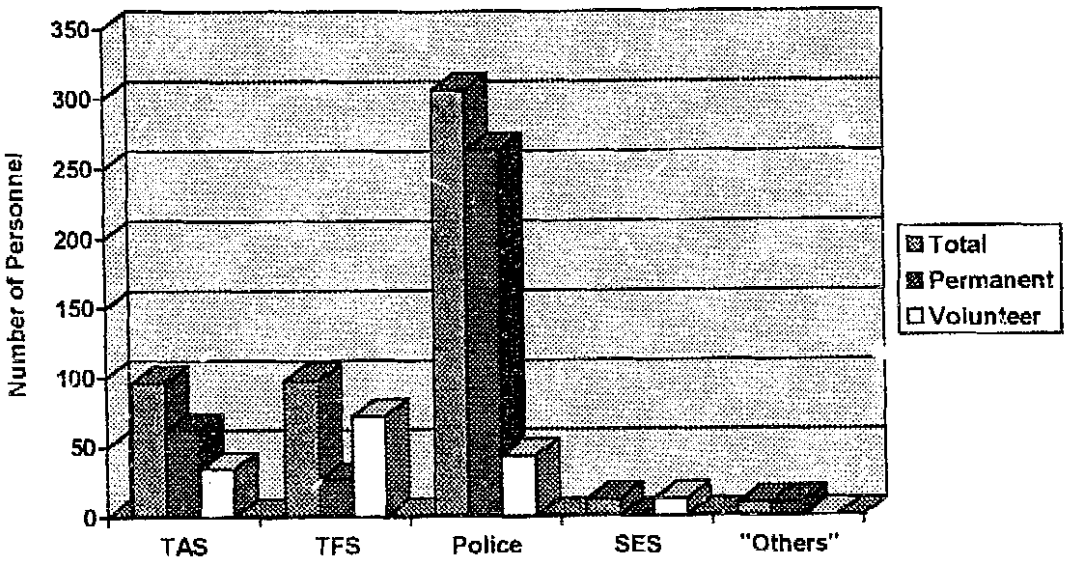
## 8. Utilisation Comparison

8.1. The following graphs provide a comparison of the number of personnel (by Service) who were assisted by the Team in the 1995 - 1996 financial year.

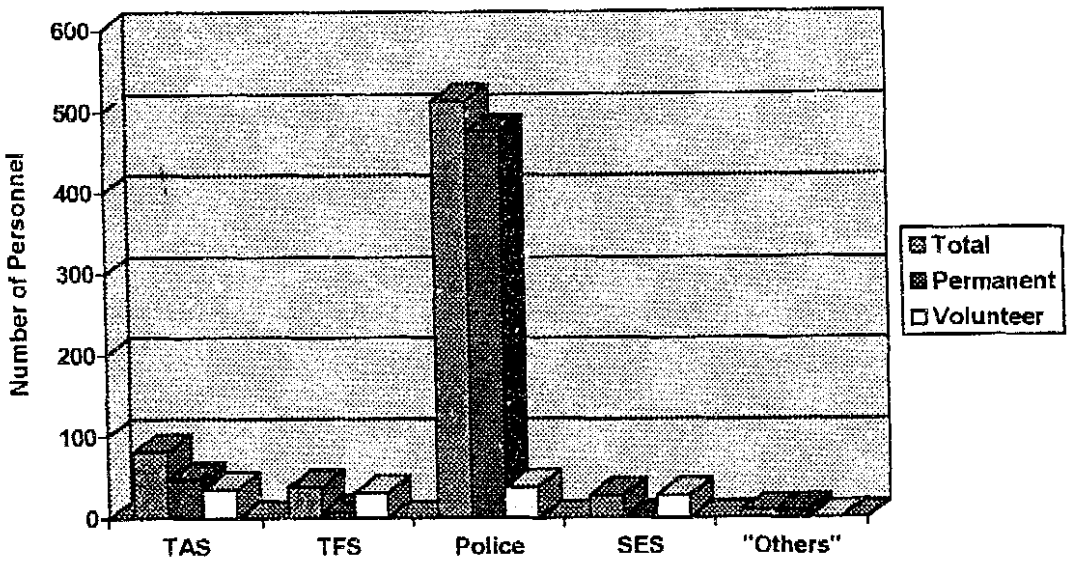
### 8.2. Assessed



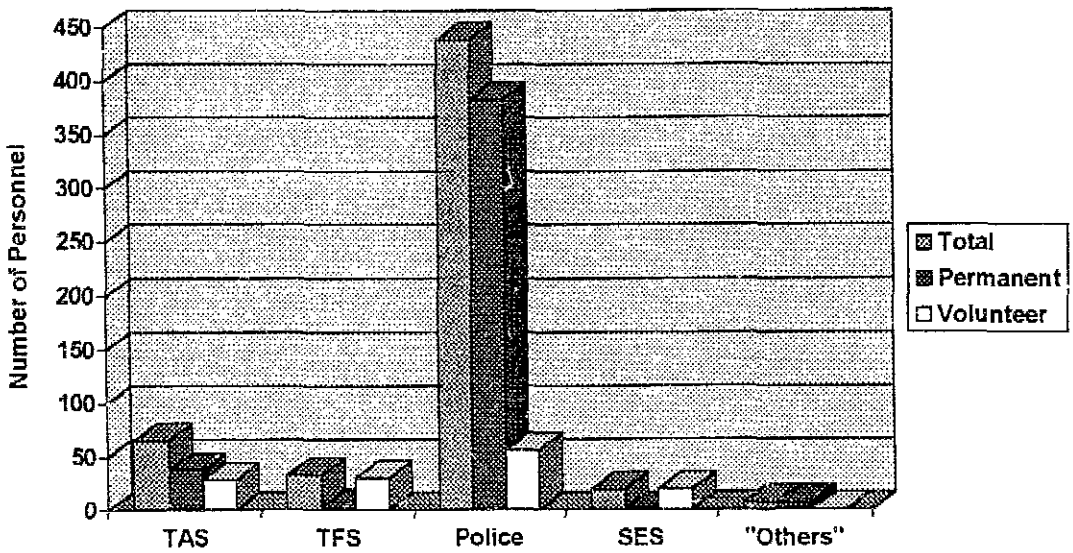
## 8.3. Defused




## 8.4. Debriefed



### 8.5. Followed-up




## 9. Utilisation of Personnel

9.1. Team members contributed a significant amount of time throughout the year. The time (in hours) contributed in activations was:

| | |
|---|---|
| *Port Arthur Incident (total)* | 3875.65 |
| *All Other Incidents* | |
| • *Off-duty time* | 652.85 |
| • *On-duty time* | 366.00 |
| **Total:** | **4894.50 hours** |

Note: The calculation of work time includes psychologists paid time.
The calculation of time does not include the Clinical Consultant's time or the Team Co-ordinator's time (unless acting as a peer).

# 10. Evaluation Reports

**10.1.** The Team has continued to distribute evaluation reports to personnel who participate in a critical incident stress debrief - although they were deliberately not distributed (except for one debrief) at debriefs for the Port Arthur incident. The evaluation reports provide a descriptive analysis of the incident's impact and the impressions of the benefit or otherwise of the debriefing process. They are distributed with a request that they be completed and returned.

**10.2.** The return rate for the year was 39.3% and once again it was higher for volunteers than it was for permanents:

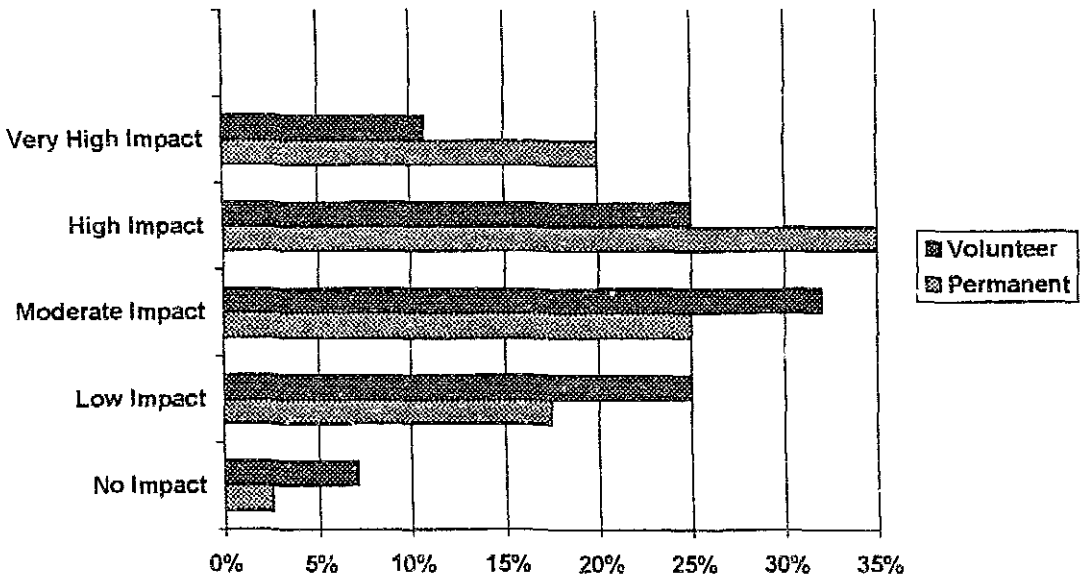
- ***Permanents:*** **33.60%**
- ***Volunteers*:** **51.85%**

**10.3.** Compared with last year the return rate for permanents increased marginally whilst for volunteers it decreased. Overall the return rate is acceptable in comparison to general survey results. Further encouragement at debriefs might need to be undertaken to increase the rate.

## 10.4. Impact of Incidents

**10.4.1** In their evaluation report, personnel are requested to rate the impact of the incident on them at the time of the incident and a few days after it.

**10.4.2** The rating of the "Impact of the Event" *at the time of the incident* is produced below.



**10.4.3** From these figures it can be seen that attendance at critical incidents impacted upon personnel and that the impact is predominantly moderate to very high amongst both permanents (80%) and volunteers (69.9%).

**10.4.4** Whilst these figures differ from last year (permanents 76.7% and volunteers 87%) the difference can be accounted for in the nature of the incidents attended.

## 10.5. Significant Factors

**10.5.1** It is well recognised that personalising incidents (relating to them in some way) and uncertainty (e.g. unpreparedness due to misinformation or a lack of information) can make critical incidents significant for the attending personnel.

**10.5.2** The most commonly reported significant factors for the period were:

- *victim known*
- *next of kin known*
- *own life threatened*
- *colleagues' lives threatened*
- *gruesome injuries*
- *futility of situation*
- *media involvement*
- *death of children*

## 10.6. Symptoms

**10.6.1** 26.5% of respondents felt that they experienced symptoms of critical incident stress during the incident that they attended. Some of the symptoms experienced were: anxiety, shaking, feeling dizzy, withdrawing and anger.

**10.6.2** Additionally, 47% of respondents reported that they experienced symptoms of critical incident stress within 72 hours of the incident. Some of the symptoms experienced were: feeling generally upset, agitation, doubting own abilities, continually "re-seeing" the event, lethargy, sleep disturbance, fear of a recurrence of the event, upset stomach and crying.

## 10.7. Impact on Family

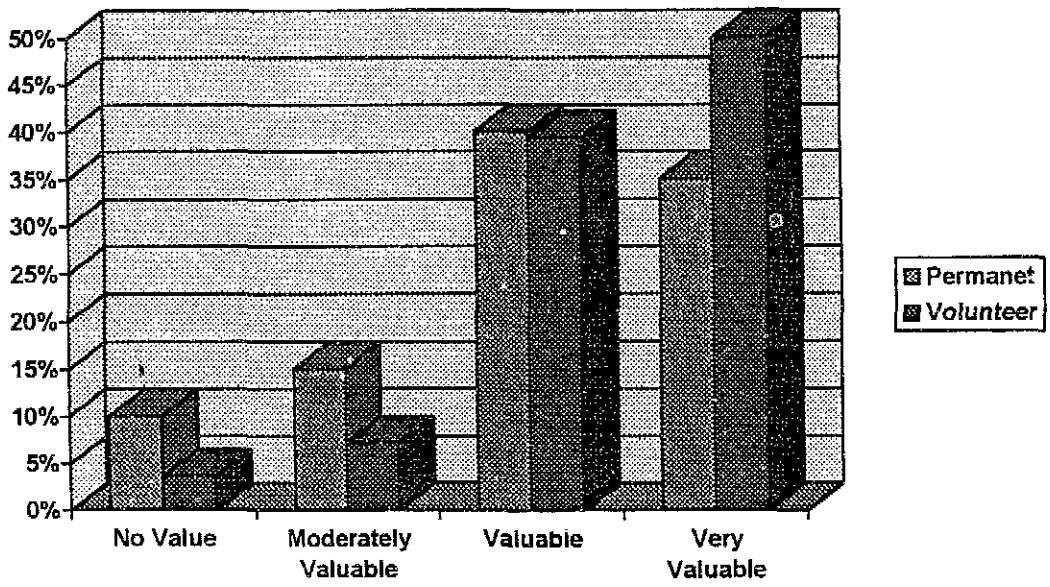
**10.7.1** There is little doubt that attendance at a critical incident impacts upon the partner, family and friends of emergency service personnel. 25% of respondents felt that the incidents they attended had impacted upon their family life. They reported that partners experienced: increased fear for their partner, sleep disturbance, feeling emotionally "distanced" and general worrying.

## 10.8 Value of Service Provided

**10.8.1** It is important to ensure that the services provided adequately fulfil the requirements of its recipients. To this end, respondents are requested to answer questions concerning the value of the service and the process.

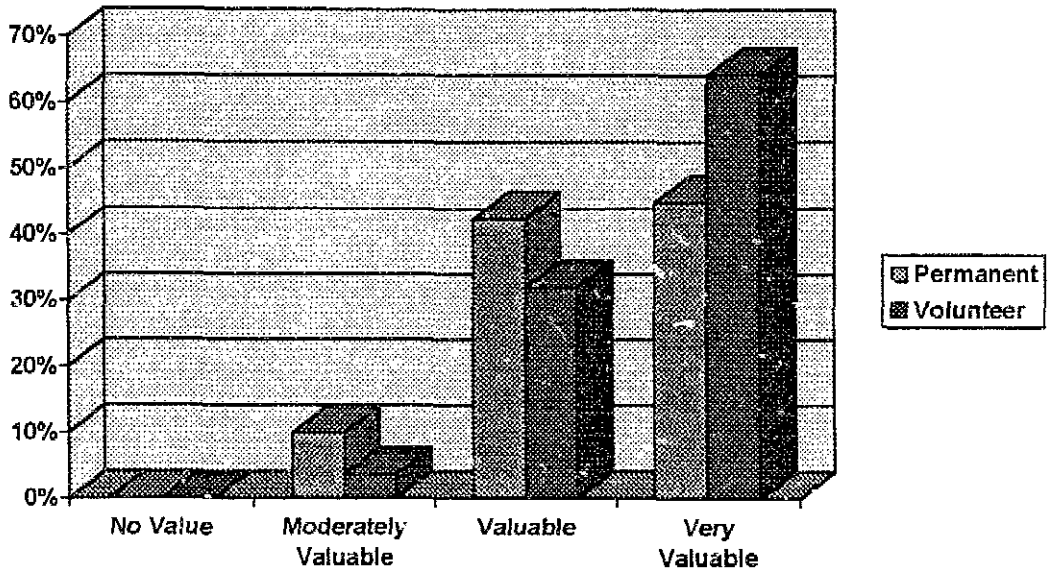
## 10.9. Value to Individuals

**10.9.1** Respondents were asked to rate the value of the debriefing session to themselves. The following ratings were obtained:




**10.9.2** The graph illustrates that 90% of permanents and 96.4% of volunteers who completed the evaluation report found the debriefing to be moderately to very valuable to them as individuals.

## 10.10 Value to the Group




Note: one permanent did not complete an answer in relation to this question

**10.10.1** This graph illustrates that 87.5% of permanents and 96.3% of volunteers who completed the evaluation report found the debriefing to be valuable - very valuable and 100% of both found it to be moderately valuable - very valuable.

**10.10.2** These figures reinforce last years figures which were based on a response rate of:

- ***Permanents:*** ***30.9%***
- ***Volunteers:*** ***62.2%***

**10.10.3** Then, 93% of permanents and 98.6% of volunteers found the debriefing to be moderately valuable - very valuable to them as an individual and 100% of both found it to be moderately valuable - very valuable for the group as a whole ("valuable" as a separate category was introduced this year).

## 10.11. Benefits of Debriefing

**10.11.1** Respondents were asked if they felt they had benefited from the debriefing process. 83.8% felt they had and cited the following reasons:

- *put everything into perspective*
- *felt better after talking about it*
- *realising that others felt the same way*
- *provided an opportunity for closure*
- *filled in the gaps*
- *answered all the unanswered questions*
- *reassurance that symptoms being experienced were not abnormal*

**10.11.2** These figures provide an indication of the extent to which critical incident stress debriefing is valued, received, and seen to be of benefit to personnel of the Tasmanian Emergency Services.

## 10.12. General Comments

**10.12.1** The majority of comments were positive and reflected very favourably on the performance of the Team over the year. Some general comments made by respondents were:

- *CISD Service is appreciated and beneficial*

- *I now realise that there are stress related situations and feel there is a need for debriefing. Keep up the good work it is needed.*

- *The CISD Team are doing a fantastic job. I greatly appreciate their efforts. I doubt my life would have been the same again without them. Thank you.*

- *CISD has been of great benefit to me since the first MVA death that I encountered in 1991. Since then I can cope with this sort of situation with a lot more confidence, knowing that if I do have a problem the CISD Team can help.*

- *Discussion with member of CISD Team and debriefing very valuable. As it was (first time) I was a little sceptical but not now. It may have helped if this type of help was available for previous incidents but I will certainly take advantage of in the future.*

**10.12.2** Some areas of concern were also raised by respondents. Generally speaking, they related to factors which could not be avoided due to logistical reasons (e.g. a slow CISD response time) or matters relating to the actual debriefing process (e.g. feeling a debrief would have been best at the time of the incident). Other areas were:

- *the size of some of the debriefing groups*
- *a perceived lack of support and understanding by management*

**10.12.3** In relation to management, respondents were also asked to state ways in which they believed their Service could help employees who experienced critical incidents. A number of the responses are reproduced below:

- *actively encouraging and promoting CISD as a positive resource.*
- *senior officers need to reassure and praise members for their efforts. This should be done as soon as possible after the incident. Criticism (no matter how minor) if expressed too soon multiplies and intensifies critical incident stress symptoms.*
- *be supportive in meeting individual recovery needs*
- *provide some "time out" in varying amounts to individual officers.*
- *a more understanding approach to the cause and effect of stress.*
- *to talk openly about incidents and not make people feel second rate if it has affected them.*
- *continue CISD format and low key follow-up on personal level from local CISD Team member.*

# 11. Education

**11.1.** During the year some thirty seven education sessions were provided around the State. Many of these were to combinations of Ambulance, Fire, Police and State Emergency Service groups. Education sessions were also provided to external groups such as Emergency Management Courses and the Royal Hobart Hospital. They varied in duration from one hour to eight hours.

**11.2.** Presentations were also given to Executives and Senior Management of the Services.

# 12. Conference Presentations

**12.1.** Presentations were made at two conferences, namely the:

1. *Australasian Critical Incident Stress Association (ACISA) Conference, Perth Western Australia (April 1996), and the*

2. *Rehabilitation at Work Conference, Hobart, Tasmania (April 1996)*

**12.2.** The presentations were primarily focused on the Tasmanian Emergency Services experience of critical incident stress management. Both papers were well received and generated a high degree of interest.

# 13. Conferences and Workshops Attended

**13.1** Attendance at conferences and workshops is recognised as being of fundamental importance to the Program. It ensures that the Team maintains pace with developments in the field of critical incident stress management and is therefore well placed to offer the highest level of service. Team representatives attended the following;

1. *Advanced CISD and Post Trauma Syndromes, Melbourne, Victoria (July 1995) - presented by Professor Jeffrey Mitchell and Dr Robyn Robinson,*

2. *Critical Incident Stress Debriefing Training, Hobart, Tasmania (February 1996) - presented by Dr Roger Solomon and Dr Robyn Robinson, and*

3. *Australasian Critical Incident Stress Association (ACISA) Conference, Perth Western Australia (April 1996).*

# Annexure "B"

## Tasmanian Emergency Services
## Critical Incident Stress Debriefing Team

### Management Co-ordinating Committee

| | | | | |
|---|---|---|---|---|
| *Mr* | *Joe* | *Paul* | *Chairman* | *State Emergency Service* |
| *Mr* | *Colin* | *Fogarty* | *Deputy Chairman* | *Tasmania Police Force* |
| *Mr* | *David* | *McKeand* | | *State Emergency Service* |
| *Mr* | *Ted* | *Preshaw* | | *Tasmanian Ambulance Service* |
| *Mr* | *Peter* | *Alexander* | | *Tasmania Fire Service* |
| *Mr* | *Mark* | *Kadziolka* | | *Tasmania Police Association* |
| *Mr* | *Wayne* | *Richards* | | *United Firefighters Union* |
| *Mr* | *Geoff* | *Becker* | | *Ambulance Employees Association* |
| *Dr* | *Mike* | *Ryan* | | *Clinical Consultant* |
| *Mr* | *John* | *Spaulding* | | *Team Representative* |
| *Mr* | *Matthew* | *Richman* | | *Team Co-ordinator* |

### Operations Committee

| | | | |
|---|---|---|---|
| *Dr* | *Mike* | *Ryan* | *Clinical Consultant* |
| *Dr* | *Jim* | *Young* | *Psychologist Representative* |
| *Mr* | *Chris* | *Day* | *North Western Region Liaison Officer* |
| *Mr* | *David* | *Peck* | *Northern Region Liaison Officer* |
| *Mr* | *Charles* | *Blizzard* | *Southern Region Liaison Officer* |
| *Mr* | *Matthew* | *Richman* | *Team Co-ordinator* |

# Annexure "C:

## Tasmanian Emergency Services
## Critical Incident Stress Debriefing Team

## Team Members

### Tasmanian Ambulance Service

| | | | |
|---|---|---|---|
| *1. Angela* | *Hine* | *Northern* | *Peer* |
| *2. Peter* | *James* | *Northern* | *Peer* |
| *3. Peter* | *Mulholland* | *Northern* | *Peer* |
| *4. Geoff* | *Becker* | *North Western* | *Peer* |
| *5. John* | *Richardson* | *North Western* | *Peer* |
| *6. Gary* | *Stewart* | *North Western* | *Peer* |
| *7. Steven* | *Lang* | *Southern* | *Peer* |
| *8. Orlando* | *Mazzone* | *Southern* | *Peer* |
| *9. Pat* | *Reardon* | *Southern* | *Peer* |
| *10. Peter* | *Stride* | *Southern* | *Peer* |

### Tasmania Fire Service

| | | | |
|---|---|---|---|
| *1. Larry* | *Cullen* | *Northern* | *Peer* |
| *2. Stephen* | *Lowe* | *Northern* | *Peer* |
| *3. David* | *Peck* | *Northern* | *Peer* |
| *4. David* | *Homan* | *North Western* | *Peer* |
| *5. Wayne* | *Richards* | *North Western* | *Peer* |
| *6. Garry* | *Smith* | *North Western* | *Peer* |
| *7. Charles* | *Blizzard* | *Southern* | *Peer* |
| *8. Peter* | *Dart* | *Southern* | *Peer* |
| *9. Wayne* | *Grincais* | *Southern* | *Peer* |
| *10. Graeme* | *Newbury* | *Southern* | *Peer* |
| *11. Phillip* | *Smith* | *Southern* | *Peer* |

## Annexure "C" (continued)

### Tasmania Police Force

| | | | |
|---|---|---|---|
| *1. Leanne* | *Brasher* | *Northern* | *Peer* |
| *2. Dale* | *Cook* | *Northern* | *Peer* |
| *3. Annabelle* | *Scott* | *Northern* | *Peer* |
| *4. John* | *Shea* | *Northern* | *Peer* |
| *5. Fiona* | *Smith* | *Northern* | *Peer* |
| *6. Phillip* | *Summers* | *Northern* | *Peer* |
| *7. Kay* | *Wells* | *Northern* | *Peer* |
| *8. Graham* | *Baly* | *North Western* | *Peer* |
| *9. Adam* | *Bessell* | *North Western* | *Peer* |
| *10. Chris* | *Day* | *North Western* | *Peer* |
| *11. Jody* | *Dennison* | *North Western* | *Peer* |
| *12. Fiona* | *Pearce* | *North Western* | *Peer* |
| *13. Hugh* | *Wilson* | *North Western* | *Peer* |
| *14. Phillip* | *Ling* | *Southern* | *Peer* |
| *15. Mark* | *Maumill* | *Southern* | *Peer* |
| *16. Debbie* | *May* | *Southern* | *Peer* |
| *17. John* | *McCormack* | *Southern* | *Peer* |
| *18. Paul* | *Reynolds* | *Southern* | *Peer* |
| *19. Matthew* | *Richman* | *Southern* | *Peer* |
| *20. John* | *Spaulding* | *Southern* | *Peer* |

### State Emergency Service

| | | | |
|---|---|---|---|
| *1. Paul* | *Webb* | *North Western* | *Peer* |
| *2. Gary* | *Muldoon* | *Southern* | *Peer* |

### Psychologists

| | | | |
|---|---|---|---|
| *1. Mark* | *Baddeley* | *Northern* | *Psychologist* |
| *2. Kathy* | *Dunning* | *Northern* | *Psychologist* |
| *3. Christina* | *Anderson* | *North Western* | *Psychologist* |
| *4. Helen* | *Spinks* | *North Western* | *Psychologist* |
| *5. Linda* | *Burrows* | *Southern* | *Psychologist* |
| *6. Joan* | *Montgomery* | *Southern* | *Psychologist* |
| *7. Peter* | *Nelson* | *Southern* | *Psychologist* |
| *8. Graham* | *Perkin* | *Southern* | *Psychologist* |
| *9. Michael* | *Ryan* | *Southern* | *Psychologist* |
| *10. Ann* | *Stark* | *Southern* | *Psychologist* |
| *11. Simon* | *Webb* | *Southern* | *Psychologist* |
| *12. Jim* | *Young* | *Southern* | *Psychologist* |