DOCTORAL THESIS

Traumatic stress disorders: sociotropy, autonomy and social support as contributing variables.

Lorensini, Sandra

Award date:
2006

Bond University

Faculty of Humanities and Social Sciences

Department of Psychology

Traumatic stress disorders: sociotropy, autonomy, and social support as contributing variables.

Sandra Lorensini

Submitted in partial fulfilment of the requirements for the

Degree of Doctor of Psychology

November 2005.

Declaration

I declare that this report does not incorporate without acknowledgement any material previously submitted for a degree in any university, or other educational institution; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

I further declare that the ethical principles and procedures specified by Bond University's Human Research Ethics Committee (BUHREC) have been followed in this research.

Sandra Lorensini

November 2005

Abstract

The present study examined relationships between social support, sociotropic and autonomous personality styles, and acute stress disorder (ASD) symptoms as predictors of post-traumatic stress disorder (PTSD). Participants were 55 patients who were assessed by two psychologists as having a diagnosis of ASD during clinical interviews following a traumatic event. When reassessed after a period of four weeks, 31of these patients were diagnosed with PTSD. Both the ASD and the PTSD groups were found to be highly sociotropic and autonomous, with the PTSD group scoring significantly higher on both groups of personality symptoms (Pillai's trace = .518, $F(6,44)= 7.88$, p<.001, η^2=.52). Significant differences were found between the two groups for perceived social support, with the PTSD group having fewer persons to support them (Pillai's trace = .521, $F(6,48) = 8.72$, p , .001, $\eta^2 = .52$) and the group was less satisfied with that support system (Pillai's trace = .255, $F(6,48) = 2.74$, $p <$ .05, $\eta^2 = .26$). The implications of the results were discussed in terms of consideration of treatment of traumatized patients and the results indicated the importance of early assessment and also of social support (both quantity and quality) in assisting recovery. Acute stress disorder symptoms were shown to be strong predictors of PTSD (Pillai's trace = .586, $F(4,50) = 12.78$, p<.001, $\eta^2 = .51$) and patients with high scores for ASD disassociation and re-experiencing symptoms were more likely to go on to have PTSD. The extent that autonomy and especially sociotropy are major factors in the in the development of PTSD should also be considered in treatment as persons who vary in their sociotropic and autonomous needs may respond better to different therapeutic styles and emphases.

Acknowledgements

It is with pleasure that I acknowledge the assistance I have received in the preparation of this thesis.

First of all, I thank my supervisor Professor Richard Hicks for his invaluable guidance and encouragement throughout the course of the thesis.

My thanks go to psychologists Mr Barry Cripps and Mr Terry Charlton for recruiting patients from their private practices and inviting them to participate in the study.

I would also like to thank my friends for their patience and support while I was working on this project.

Finally, I thank those who participated in this study – your time and effort was much appreciated and made this project possible.

Table of Contents

Method continued Page

Page

Technical supplement continued. Page

Technical supplement continued. Page

Technical supplement continued. Page

Technical supplement continued Page

Page

List of Figures

List of Tables

CHAPTER 1

Introduction

Evolving Concepts of Acute Stress Disorder and Post Traumatic Disorder

Since the 1980s considerable research interest has focussed on the psychological and physiological reactions that persons may experience following a traumatic event. This interest has included a huge body of research relating to acute stress disorder (ASD) and posttraumatic stress disorder (PTSD). A review of the research literature shows the interest in trauma and its consequences accelerated following the return of soldiers from the Vietnam War during 1965-1975 (Haley, 1974). There are, for example, 57,000 Google websites, including 13,400 Australian sites, relating to studies of Vietnam veterans and PTSD. The research studies of ASD and PTSD cover a wide range of subject content including subjects that relate to various treatment modalities.

There is also a large and varied body of Australian research focussed on the consequence of trauma and the treatment of ASD and PTSD. This includes publications (e.g., Biddle, Creamer, Forbes, Elliott, & Devilly, 2002; Devilly, 1996, 2001a; Devilly & Spence, 1999; Creamer, Forbes, & Devilly, 1999; Creamer & Forbes, 2004; Creamer & O'Donnell, 2002; Creamer, O'Donnell, & Pattison, 2004; Dearn, & Matthews, 1998; Forbes, Hawthorne, Elliott, McHugh, Biddle, Creamer, & Novaco, 2004; Hodgins, Creamer, & Bell, 2001; Matthews, 1998, 1999, 2000,2005; O'Donnell, Creamer, & Pattison, 2004; O'Donnell, Creamer, Bryant, Schnyder, & Shalev, 2003; Steindl, Young, Creamer, & Crompton, 2003) as well as numerous Australian conference presentations (e.g., Creamer, O'Donnell, & Pattison, 2002;

Devilly, 2000a, 2000b, 2001b, 2002; Forbes & Bennett, 2004; Hawthorn, 2003; Matthews, 2004, 2005).

There still are, however, questions that require answers regarding the psychological consequences of having suffered a traumatic event. Some of these are addressed in the current study. The objectives of the study are to identify social and personality factors associated with PTSD, and the ASD symptoms that correlate with later PTSD symptoms and diagnosis, to further research in an area sparse with information. The variables examined are the numbers of people participants have to support them, their perceived satisfaction with those social supports, the underlying personality characteristics of sociotropy and autonomy, and ASD and PTSD symptoms. A comparison will be made between persons who are assessed as having an ASD and do not go on to have PSTD, and those who have ASD and go on to have PTSD.

The theoretical underpinnings for an understanding of the nature of trauma and its psychological/physiological impact on the individual and how these behaviours and reactions are affected in the diagnostic dimensions categorised as ASD and PTSD are outlined below. The previous research findings that pertain to the dimensions to be explored in this research that impart direction to the research questions that are to be tested are also discussed.

According to Tedeschi and Calhoun (1995) there are three possible outcomes as a result of exposure to a traumatic event: (1) impairment where a person may suffer ASD, (2) further impairment where a person goes on to have PTSD as a result of their experience and (3) recovery to pre-event level of functioning or to a level of

functioning superior to that displayed prior to the event. However, the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV; American Psychiatric Association, 1994) specifies a further outcome from being exposed to a traumatic event: delayed onset PTSD. This relatively uncommon variant of the syndrome has been recognized in earlier editions of the Diagnostic and Statistical Manual of Mental Disorders and has been reported in studies of populations such as World War 2 veterans (Herrmann & Eryavec, 1994). Delayed onset PTSD, as specified in DSM-IV, indicates that at least six months have passed between the traumatic event and the onset of the symptoms.

An important need in the management of people who have been exposed to a traumatic event is to identify those people who are at risk of a long-term psychological disorder. The major disorder that develops following trauma is PTSD. Trauma is qualitatively different from the stressors associated with everyday life events: the primary difference between trauma and more or less normal life events is one of degree or magnitude. The following four groupings comprise 19 potentially traumatic experiences, as suggested by DSM-IV (American Psychiatric Association, 1994): (1) assaultive violence: combat, rape, being held captive, being tortured, being shot or stabbed, being sexually assaulted, being mugged, held up, threatened, or badly beaten (2) other injury or shocking experience: accident, fire, flood, earthquake, life-threatening illness, witnessing violence, discovering a dead body (3) learning about trauma to a loved one (family member or close friend) and (4) sudden unexpected death of a loved one (Harbert, 2002).

Any traumatic event can present a threat to the conceptual framework we rely on to understand our world. Traumatic experiences, those extreme occurrences outside

the realm of normal everyday life, can exert significant impact on psychological functioning (Horowitz, 1991). According to Harbert (2002), acute traumatic stress occurs when interpretations of a traumatic event, insufficient coping mechanisms, and limitations in resources (individual or group) result in stress too severe to be relieved easily. Symptoms of acute stress disorder may manifest shortly after the traumatic event.

Acute Stress Disorder

Acute stress disorder (ASD) is a recently developed diagnosis that describes posttraumatic reactions that occur in the first month following a trauma. A major reason for the introduction of the new diagnosis ASD in the Diagnostic and Statistical Manual of Mental Disorders –IV (DSM-IV) during 1994 was to identify acute posttraumatic stress reactions that are precursors of chronic posttraumatic stress disorder (Classen, Koopman, Hales, & Spiegel, 1998). To meet the DSM-IV diagnosis of ASD a person must have been exposed to a traumatic event in which they experienced, witnessed, or were confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others, and the person's responses involved intense fear, helplessness, and/or horror (Criterion A). They must have at least three of five dissociative symptoms: a subjective sense of numbing, detachment, absence of emotional responsiveness; reduction in awareness of surroundings; derealization; depersonalisation; and dissociative amnesia (Criterion B); at least one re-experiencing symptom: re-experiencing the traumatic event through recurrent images, thoughts, dreams, illusions, flashbacks, a sense of reliving the experience; distress on exposure to cues of the traumatic event (Criterion C); marked avoidance symptoms: avoiding stimuli

that arouse recollections of the trauma including thoughts, feelings, conversations, activities, places, and people (Criterion D); and anxiety or arousal symptoms: sleep difficulties, irritability, poor concentration, hyper vigilance, exaggerated startle response, motor restlessness (Criterion E). Further, the disturbance must cause significant distress or impairment in the social, occupational, or other important areas of functioning or impairs their ability to pursue tasks such as obtaining necessary assistance or mobilizing personal resources. In addition, the disturbance lasts for a minimum of two days and a maximum of four weeks, and occurs within four weeks following the traumatic event (American Psychiatric Association, 1994). Although the majority of studies have indicated that approximately 80% of individuals with ASD subsequently develop PTSD, these same studies have indicated that many people develop PTSD without initially displaying ASD (e.g., Brewin, Andrews, Rose, & Kirk, 1999; Bryant & Harvey, 1996; Harvey & Bryant, 1998; Bryant, Moulds & Guthrie, 2000).

Post Traumatic Stress Disorder

The symptoms of PTSD have been described in the literature since the First World War. Details of the symptoms can be found, for example, in the Epic of Gilgamesh, Homer's Iliad, and Ciceros' Letters to His Friends (Tomb, 1994). However, until the last century, little attention was paid to them during times of peace and rarely to traumas other than those arising from combat carnage. Notable exceptions were accurate descriptions by Shakespeare in King Henry IV and a diary reference by Samuel Pepys of his reaction to the Great London Fire in 1666 (Trimble, 1985).

During the past century, clusters of trauma-associated symptoms have been isolated and named. Soldiers of the American Civil War suffered from general

weakness, heart palpitations and chest pains and the conditions of these men were called ‘soldier’s heart’ and ‘effort syndrome’. Soldiers of the First World War who were thought to have subtle brain damage were diagnosed as being ‘shell shocked’, whereas those with a significant psychological component were considered to have ‘battle fatigue’ or ‘combat neurosis’. Around the same time, individuals suffering from chronic pain and anxiety were claiming compensation for railway accidents and were given the diagnosis of ‘railway spine’ or ‘compensation neurosis’ depending upon whether they were considered to have a neurologic injury or were fabricating (Tomb, 1994).

It was not until World War 11 and the work of Kardiner (1941) that physiologic and psychological symptoms were combined to form the concept ‘physio neurosis’. The Diagnostic and Statistical Manual of Mental Disorders – (DSM-1) (APA, 1952) created the diagnosis ‘gross stress reaction’ for symptoms of combat or civilian catastrophe. This diagnosis was placed into a category of ‘transient situational personality disorders’, reflecting the view that such conditions were expected to be acute reactions to unusual stress that resolve quickly. If there were prolonged or persistent reactions an alternative diagnosis was to be considered by the clinician and implied the possibility of a pre-morbid condition (Wilson, 1994). A later category, ‘transient situational disturbance’ given by DSM-11 (APA, 1968) reduced the reaction to that of a brief adjustment.

In the early and mid 1970s, veterans of the Vietnam War were being hospitalised in psychiatric units and receiving diagnoses of schizophrenia or other psychotic disorders, even though combat-related problems had been seen in earlier war veterans (Haley, 1984). Contemporaneously, clinicians were recognizing common patterns in

the psychological sequelae of women who had been sexually assaulted, and the term rape trauma syndrome entered the literature (Becker, 1982; Burgess & Holmstrom, 1974). These women were observed to be avoidant, hyper-vigilant, easily startled, and flooded with thoughts and images of the assault that could not be easily dispelled. Following the evidence of psychological problems of soldiers following the Vietnam War and the work of Horowitz and Solomon (1975) on trauma, DSM-111 (APA, 1980) created a specific category 'post traumatic stress disorder'. Later studies involved examination of trauma in the civilian population (e.g., Horowitz, 1986). The revised manual DSM-111R (APA, 1987) required that there be a severe stressor (one outside the range of usual human experience) which generated a triad of (1) intrusive, re-experiencing events; (2) avoidance responses to evidence of the trauma or generalized psychological numbing and isolation and (3) widespread physiologic arousal, not previously present.

The emphasis of PTSD in DSM-IV (APA, 1994) shifted the severity of the stressor to a mixture of (i) being exposed to a traumatic stressor and (ii) the person's reaction and implied vulnerability to it. A traumatic stressor can be extreme, such as the mass shootings at Port Arthur, Tasmania, or incidents that are becoming increasingly common in the community such as armed robbery, sexual assault, major work accidents, road traffic accidents, catastrophic medical illness such a myocardial infarction and burns, and witnessing injury (Hickling & Blanchard, 1992; Miller, 1994). Persons in occupations such as fire fighters, body handlers, police and rescue workers, and health care-providers are routinely exposed to life threatening situations or violent and grotesque scenes (Davis & Breslau, 1994).

Post- traumatic stress disorder's most distinctive feature is its etiological event. Without this event, PTSD symptoms are indistinguishable from symptoms associated with combinations of other psychiatric diagnosis (Young, 1995). Therefore, to qualify for a diagnosis of PTSD, the person must have experienced, witnessed or otherwise been confronted with an event which involved actual or threatened death, serious injury, or threat to physical integrity and the person's response must include intense fear, helplessness, or horror. Symptom manifestations fall into three broad categories: intrusive memories, avoidance or numbing symptoms, and physiological hyper-arousal. Intrusive memories consist of the traumatic event being re-experienced in some way. Memories may intrude into consciousness repetitively, without warning, or they may be experienced in the waking state as flashbacks or vivid re-enactment experiences in which the original fear and psychological distress are reactivated and relived. During the sleeping state they may occur in the form of thematically related nightmares. In addition, when faced with actual or symbolic cues associated with the traumatic event, the person may exhibit intense psychological and/or physiological reactions. Avoidance and numbing symptoms reflect the person's attempt to gain psychological and emotional distance from the trauma. They may avoid thoughts, feelings, conversations, activities, places, or people that arouse recollections of the original trauma. They commonly state they no longer have strong feelings, they have a markedly diminished interest or participation in significant activities, or that they feel numb. The trauma victim must also experience symptoms of increased physiological arousal. They are likely to experience sleep disturbance, decreased concentration, irritability, and an over-reactivity to stimuli such as hypervigilance and exaggerated startle response (Caballo, 1998). According to

DSM-1V (APA, 1994) a diagnosis of PTSD requires that symptoms persist for more than one month or to have begun at least six months after the trauma (delayed onset), whereas trauma victims who manifest symptoms before one month are given the diagnosis of ASD. The main distinction in making a differential diagnosis lies in the duration of symptoms after the traumatic experience has occurred.

Numerous studies (e.g., Brewin, Andrews, Rose & Kirk, 1999; Bryant & Harvey, 1998; Harvey & Bryant, 1998) have indicated that approximately 80% of trauma survivors who initially suffer ASD will meet criteria for PTSD six months later, and an estimated 75% continue to have the diagnosis two years after the event. Although no Australian figures could be found in the literature, data from the United States national co-morbidity study indicates PTSD prevalence rates are 5% and 10% among American men and women respectively (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1996). However, these figures are questioned by those who consider PTSD to be over or under diagnosed.

It is the belief of Sparr (1995) and Ellard (1997) that the criteria for a diagnosis of PTSD is over diagnosed, for example, in inappropriate clinical practice where patients are taught the diagnostic criteria for the purpose of receiving compensation. Under-diagnosis, on the other hand, is influenced by patients presenting with one or more concomitant disorders such as depression and/or substance abuse and the triad of intrusive symptoms, avoidance and hyperactivity is missed (Ratna & Barbenel, 1997). To ensure an accurate diagnosis of PTSD was made in the current study, the patients were assessed according to the diagnostic criteria for 309.81 post traumatic stress disorder (Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, American Psychiatric Association,

1994) following a clinical interview using the Clinical Administered PTSD Scale (Blake, Weathers, Nagy, Kaloupek, Charney & Keane,1998).

Theories of Post Traumatic Stress Disorder

Prior to the recognition of PTSD as a syndrome, the majority of theoretical ideas concerning stress reactions were psychodynamic in origin and noted two major characteristics, repetition (re-experiencing) and denial (avoidance). Since the 1950s there has been a plethora of theories postulated, many with overlapping concepts. These include in the main five types or emphases: learning, information processing, cognitive processing model formulation, psychobiologic, and psychosocial theories.

Learning Theories

Numerous authors have proposed that the development of PTSD symptoms can be explained by classical and operant conditioning (e.g., Holmes & St Lawrence, 1983; Keane, Zimering, & Caddell, 1985). In this learning theory model the trauma is the unconditional stimulus (UCS), which evokes extreme fear, the unconditional response (UCR). The trauma (UCS) becomes associated with a trauma memory that then becomes the conditioned stimulus (CS). Thus, anytime the trauma is remembered, the memory (CS) evokes extreme fear that now has become the conditional response (CR). Then, via stimulus generalization and higher order conditioning, not only the trauma memory but also cues associated with the memory and neutral cues reminiscent of those triggers become conditioned stimuli that elicit extreme fear (CR). 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. The principals of higher-order conditioning in stimulus generalization are used to explain why symptoms often worsen over time as more and

more stimuli elicit traumatic memories and physiological arousal. This theoretical approach has led to a number of treatment regimens including stress inoculation training (SIT) developed by Meichenbaum (1974) and later adapted for individual and group formats (e.g., Kilpatrick, Veronen, & Resick, 1982; Resick & Jordan, 1988; Veronen & Kilpatrick, 1983). The learning theory has much surface validity as an explanation of anxiety disorders (Chemtob, Roitblat, Hamada, Carlson, & Twentyman, 1988) and much research support (e.g., Black, & Bruce, 1989; Bouton, Mineka, & Barlow, 2001; Catanzaro, Wasch, Mearns, & Kirsch, 2000; Clark, 2004). However, this theory has deficiencies including that it fails to explain individual differences in developing/not developing PTSD when exposed to the same trauma. Other theoretical models of the development of PTSD include those of information processing.

Information Processing Theories

The information processing theoretical model of the development of PTSD by Howowitz (1986) incorporated psychodynamic ideas and cognitive theories of emotion and information processing. Until the traumatic event is incorporated into existing cognitive schemas or new schemas are developed, the trauma remains in active memory. In active memory, the mechanisms of denial and emotional numbing prevent the patient from being overwhelmed by it. In an attempt to process and integrate the traumatic information, representations of the event tend to be repeated resulting in intrusive thoughts and images that are accompanied by intense emotions. Posttraumatic stress disorder symptoms such as nightmares and flashbacks are intrusions aimed at facilitating information processing whereas avoidance and numbing are seen as control processes. Excessive controls may prevent the

completion of the information processing of the event. This information processing theory also includes the importance of social factors, such as strong, positive support to protect against the development of PTSD. Potential problems with this theory, however, are that it fails to explain individual differences in developing/not developing PTSD when exposed to the same trauma, and the clinical procedures are descriptive rather than explicit.

A further information processing theory by Foa, Steketee and Rothbaum (1989) suggests that traumatic events create large and complex fear networks in the brain that are readily activated because of the large number of interconnections formed though conditioning and generalization. Associations that were once considered neutral or safe may now elicit the fear structure and subsequent avoidance behaviour. This leads to a sense of unpredictability and uncontrollability that develops and maintains PTSD. The central theme of this theory is that patients require the successful processing or integration of the trauma into a view of the world that restores their feelings of security and invulnerability. Therefore, the provision of early psychological intervention as well as a social support network would assist them in assimilating and integrating the traumatic event and provide them with support needed to help restore their feelings of security and invulnerability.

Although classified as an information processing theory, another model by Resick and Schnicke (1992) focuses on the schematic reconciliation of the strong affect associated with the trauma. They argue that post-trauma affect is not limited to fear but includes other strong emotions such as shame, anger, or sadness. In the case of strong affect, it may be that the cognitive processing does not occur because trauma victims avoid and subsequently never accommodate the information. While people .

may be able to distract themselves from normal affective experience, traumatic events are associated with greater emotion that cannot be avoided entirely. Because persons who have experienced a traumatic event do not process, categorize and accommodate the information, memories emerge as intrusive thoughts, flashbacks or nightmares. Resick and Schnicke (1992) assume that the effect, once accessed, will dissipate quickly and the schematic processing of the memory will begin. Besides learning and information processing theories, other explanations include a cognitive processing model formulation of post-traumatic reactions and psychobiologic theory.

Cognitive Processing Model

The more recent theoretical model by Creamer (1995) reformulates earlier theories (e.g., Creamer, Burgess, & Patterson, 1992; Foa, Steketee, & Rothbaun, 1989; Horowitz, 1986) to provide an explanation of the cognitive mechanisms of recovery from a traumatic event. This cognitive processing model sees the cognitive processing mechanisms involved in recovery over time as occurring in five stages as shown in Figure 1:

Figure 1. ***Cognitive Processing Model of the Development of PTSD.***

Stage 1 Objective exposure	The severity of the exposure to trauma does not impact directly on subsequent adjustment.
Stage 2 Network information:	The nature and content of the traumatic memory network is determined by many factors such as what happened, appraisal of threat, the individual's response, the meaning attached to experience, pre-trauma personality, prior life experiences, and cultural expectations.

Figure 1 continued

Stage 3 Intrusion	While intrusive memories are associated with distress at the time, they can also be conceptualised as a form of processing the trauma. Intrusive thoughts can be functional and gradually modify the memory network, or they can be dysfunctional and result in high arousal, and escape and avoidance strategies. High levels of intrusion are associated with elevated symptom levels at the time, but reduced levels in the future. Effective recovery is facilitated by voluntary activation of the memory network such as talking about the trauma with others, therapeutic exposure to trauma-related stimuli, and deliberate attempts to get new information about the incident.
Stage 4 Avoidance	The memory network is activated by intrusive thoughts and may cause considerable distress. Attempts at blocking and avoiding memories may reduce this distress but be maladaptive in the long run. Effective recovery depends on the memory network being activated long enough to allow for modification.
Stage 5 Outcome	Activation of memories and incorporation of new information allows network resolution to take place and results in reduced levels as the memories are modified.

Although such factors as pre-trauma functioning, the recovery environment, and the biological sequela of trauma are not incorporated in this model, Creamer (1995) acknowledges their importance. Again, a potential problem with this theory is that it fails to explain individual differences in developing/not developing PTSD when exposed to the same trauma.

Psychobiologic Theories

Although generally understood as a psychological disorder, PTSD may also be viewed from a neurobiological perspective. Current neurobiological models of the acute stress response implicate the amygdala and hippocampus as key brain areas that

are involved in the registration of potentially dangerous situations and in the later formation of the memories of such events (Davis, 1992; LeDoux, 2000; Southwick, Bremner, Krystal & Charney, 1994; Yehuda, 1998). Researchers of psychobiologic models have accumulated evidence to suggest that severe psychological trauma can cause alterations in the organism's neurobiological response to stress even years after the original trauma. They argue that long-standing alterations in the biologic response to stress may contribute to PTSD symptoms. Increased sensitivity and sensitisation of the nor-adrenergic system may leave the individual in a hyper-aroused, vigilant, sleep-deprived and, at times, explosive state that worsens over time. To quiet these symptoms of hyper-arousal, persons suffering from PTSD often withdraw and use substances, particularly central nervous system depressants such as alcohol and cannabis, which suppress peripheral and central catecholamine function. Alterations in other neurobiological systems cause intrusive memories, dissociation phenomena, and numbing.

A variant of the psychobiologic theory is by Jones and Barlow (1992) who acknowledge the role of biological vulnerability as a cause of PTSD. They postulate that when individuals with inherited biological and psychological vulnerabilities are exposed to a trauma and develop anxious apprehension, the stage is set for PTSD. However they failed to mention what the inherited vulnerabilities might be. Psychobiologic theorists expect that with further advances in neurobiological technology such as brain imaging, a more complex understanding of changes in the central and peripheral nervous system functioning will emerge. While these theories provide a psychobiologic model for the development of PTSD, they fail to consider personal characteristics and the recovery environment. A further theory of the

development of PTSD is the psychosocial model that includes personal characteristics and the recovery environment

Psychosocial Theories

The psychosocial model of PTSD (e.g., Green, Wilson & Lindy,1985; Joseph, Williams, & Yule, 1997) takes into account characteristics of the individual and the recovery environment in which that person experiences and attempts to recover from the traumatic event. The processing of the event (appraisal, alterations between intrusion and avoidance, and whether it reaches a point of psychic overload) takes place within an individual and social context. Whether a person is able to assimilate the trauma gradually and re-stabilize is dependent upon different experiences (e.g., bereavement, life-threat, exposure to grotesque sights, combat stress), different roles (e.g., survivor or rescue worker, passive or active victim), and individual characteristics (the person's appraisal of the stressor based on prior experience, and pre-existing psychopathology). According to Bremmer, Southwick and Johnson (1993), veterans with combat-related PTSD, for example, are more likely to have a history of reported childhood abuse than those without PTSD.

The strength of the psychosocial theory is the inclusion of the environment – the person's social supports, the use that is made of these supports, cultural characteristics, and the attitude of society. An example of the importance of the recovery environment is best demonstrated by the hostile reception given to Vietnam veterans on their return to Australia. The claim by Allodi (1994) that the greatest damage to the returning soldiers to the United States of America was the rejecting atmosphere of the American people toward them (because of the unpopular war) can certainly be generalized to the Australia soldiers. Similarly, Heard (2005) reported

that conscripts returning to Australia after serving in Vietnam suffered PTSD to a greater degree than members of the Regular Army who returned to bases where they were understood and supported by their colleagues.

Summary of PTSD Theories

While the above theories attempt to explain the development of PTSD following a traumatic event, they each have limitations. The earlier theoretical models such as learning theory (e.g., Holmes & St. Lawrence, 1983; Keane, Zimering & Cadell, 1985) are limited because of they explain the development of PTSD through classical and operant conditioning only. The later information processing theories, for example that of Howowitz (1986) incorporates psychodynamic ideas and cognitive theories of emotion and information processing in the development of PTSD. The theory by Howowitz (1986) also included the importance of social support following a traumatic event. Similarly, other information processing theories focused on the schematic reconciliation of the affect of trauma, and included emotional variables such as shame, anger and sadness (e.g., Resick & Schnicke, 1992). The psychobiologic theory (e.g., Southwick, Bremner, Krystal, & Charney, 1994) limits the development of PTSD to alterations in the person's neurobiological response to stress following a traumatic event. However, none of the above theories succeeds in explaining individual differences in developing or not developing PTSD when exposed to the same traumatic event. Whereas the early psychosocial theory of Green, Wilson, and Lindy (1985) took into account the characteristics of the individual in the development of PTSD, these only included the individual's processing of the event based on different life experiences, roles, prior experience, and pre-existing

psychopathology. The strength of this theory, however, was the inclusion of environmental factors, especially social support.

This thesis examines as one of its thrusts, the role of the quantity and the perceived quality of social support of participants with a diagnosis of ASD and compares them with those who go on to develop PTSD.

Social Support

In recent years, social support has received increasing attention as an important variable that intervenes between trauma and PTSD. Social support has been defined as the presence of others, or the resources provided by them, prior to, during, and following a stressful event (Ganster & Victor, 1988). Since the 1970s there has been a growth in the literature which has been fuelled by the consistency of the finding that social support is related to health outcomes, with evidence of the relationship as strongest for mental health: social support was linked to psychiatric morbidity, suicide, depression, anxiety, and mood states (Ganster & Victor, 1988). An early study of Israeli soldiers following the 1982 war in Lebanon, for example, found a relationship between social support from officers and combat stress reactions (Solomon, Mikulincer & Hobfoll, 1986). Those soldiers who reported a lack of social support from officers were at a significantly greater risk from combat stress reactions and reported greater feelings of loneliness.

As shown earlier in the discussion of theories, there are many, often overlapping, theoretical approaches to the aetiology of PTSD, but many of which do not provide mechanisms that would explain a moderating role for social support in the development of PTSD. The theory of Horowitz (1986), for example, proposes phases of response to a traumatic experience based on theories of information processing and

suggests that emotional support and, in particular, the opportunity to talk with supportive others about emotions connected with the traumatic experience will contribute to recovery. The importance of social support in particular is accounted for by the working through phases, which includes forming new cognitive schemas or revising schemas. According to Horowitz, the process of working through includes talking about the trauma and its related emotions so that the experience can be assimilated.

A review of the literature shows studies of social support and PTSD have used a variety of measures which reflect the wide range of types and functions of social support (e.g., Affleck, Tennen, Urrows, & Higgins, 1994; DeLongis, Folkman, & Lazarus, 1988; Ogden & Mtandabari, 1995;Turner Cobb, & Steptoe, 1996; Tyler & Cushway, 1995) although there has been little agreement over which facet of social support is the most important (Cook & Bickman, 1990; Solomon, Smith, Robins, & Fischback, 1987), and in which contexts. As DeLongis, Folkman and Lazarus (1988) point out, persons with low psychosocial resources are vulnerable to illness and mood disturbances when their stress levels increase. Similarly, other researchers claims it is the measurement of perceived emotional support that has shown consistently positive findings (e.g., Green & Berlin, 1987), while Cohen and Wills (1985) assert that quality of support is important when people experience stress, although still other research indicates that support network size is a moderator of PTSD (e.g., Turner, Cobb, & Steptoe, 1996).

Findings from a study of the psychological after-effects on a group of New Zealanders following a severe cyclone (an unexpected, unusual, and extremely frightening event which put enormous demands on the victims' psychological

resources), lent support to the argument that it is not the quantity of support which is available, but rather the quality of that support which best attenuated the negative impact of exposure to trauma (Eustace, MacDonald & Long, 1999). This impact will be further examined in the current thesis. In an event such as a cyclone, survivors are at risk of developing long-term psychological problems, including PTSD. In this study of cyclone victims, the assistance and support given after the disaster appeared to be the important factors determining psychological outcome for these individuals. Similar results were found in a study of 527 New Zealand police officers following traumatic experiences (Stephens & Long, 1999). This study showed higher support from supervisor and non-work sources and perceptions of greater ease of talking about traumatic experiences were related to lower PTSD symptoms regardless of the level of the trauma. However, an alternative explanation for the strong effect of the reported ease of talking is that people with higher levels of PTSD symptoms were more likely to have difficulties talking about their trauma.

An assumption often made in the earlier social support literature is that the interaction between the individual and the social network is basically positive and the existence of a support network will reduce traumatic stress (Lyons, 1991). However, studies of social support of persons who experienced traumatic events have often overlooked the negative aspects of interpersonal relationships and the uncertain benefits of social supports (e.g., Coyne & DeLongis, 1986). Similarly, Wortman (1984) deduced that negative relationships might actually explain more of the variance in adjustment levels following trauma than do positive relationships.

A particularly relevant example of negative relationships and PTSD is the further trauma experienced by Australian soldiers when they returned from war service in Vietnam. A large body of literature (e.g., Figley & Leventman, 1980; Walker & Cavenar, 1982; Brende & Parson, 1985; Catherall, 1989; Johnson, Feldman, Southwick, & Charney, 1994) discusses the relationship between the negative emotional responses the Vietnam veterans received from spouses, relatives, friends, their wider social group, and a large proportion of the general public and the development of their PTSD. Moreover, when support was supplied at homecoming it has been described as a significant source for better mental health for war veterans and prisoners of war (Solomon, 1993; Neria, Solomon, & Nekel, 1998).

In a study conducted within the Metropolitan Fire Brigade of Melbourne and the Country Fire Authority of Victoria (Regehr, 2001), findings showed that individuals encountering traumatic events varied significantly in their levels of distress, based on their perceptions of the responses of others. The author concluded that perceptions of social support by fire fighters influenced the severity of their posttraumatic symptoms. It was also suggested that while some emotional response to disturbing events may be normal, the severity of the symptoms co-varied with an individual's ability to develop and sustain supportive relationships to buffer the impact of events. A further conclusion was that individuals who are unable to trust others, are sensitive to rejection, are easily hurt by others, and who experience difficulty in making friends are more likely to experience higher levels of distress following a traumatic event. Therefore, the current study will identify the participant's perceptions of both the quantity and the quality of their social network following their traumatic event

Results that conflicted with those of Regehr (2001) were found by in a study of 86 paramedics exposed to traumatic events in an emergency-service organization in Toronto where the relationship between PTSD, social support and personality factors were considered (Regehr, Goldberg, Glancy, & Knott, 2002). In this study, the authors found there was no significant association between perceived levels of support and PTSD and they suggested that underlying personality factors considerably impacted on PTSD symptoms. Other researchers have also demonstrated that a link exists between PTSD and personality pathology. A higher rate of personality disorder, for example, was reported among combat veterans diagnosed with PTSD in a study by Southwick, Yehuda, and Giller (1993) where it was shown the most commonly identified pathologies included borderline, obsessive-compulsive, avoidant, and paranoid personality disorders. Similarly, high rates of personality pathology among Vietnam veterans were reported by Sherwood, Funari, and Pikarski (1990) where 76% of their participants exhibited passive-aggressive character style and 70% exhibited avoidant character style. Further, other studies point to the high correlations between PTSD and character pathology (e.g., Hyer, Woods, & Boudewyns, 1991; Richman & Frueh, 1996; O'Toole, Marshall, Schureck, & Dobson, 1998).

A purpose of the current research is identify the perceived quality and to quantify the participant's level of social support following them having experienced a traumatic event. It is expected that those patients who have more people they can count on to be dependable, can help them feel more relaxed when they are under pressure, who accept them totally, who care for them regardless of what is happening to them, who help them feel better when they are feeling down in the dumps, and who

can be counted on to console them when they are very upset will be less likely to go on to have PTSD than patients with fewer people to support them.. Similarly, the patient's perceived satisfaction with the amount of support they received from the above-mentioned people will be measured. It is expected that those patients who are more satisfied overall with the quality of support they receive will be less likely to go on to have PTSD than those who are less satisfied.

Personality Factors: Sociotropy and Autonomy

Although the relationship between personality traits and psychological well-being has received considerable attention in the literature, there appears to be little published research that explores the relationship between personality traits and the development of PTSD. The research exploring the relationship between the personality characteristics sociotropy and autonomy and PTSD is particularly sparse, with only one published article (Kolts, Robinson, & Tracy, 2004).

The personality dimension sociotropy refers to a person's need for positive interchange with other people. Highly sociotropic persons are very concerned about the possibility of being disapproved of and they often act in ways designed to please others in order to secure their attachments. This cluster of personality dimensions includes passive-receptive wishes (acceptance, intimacy, understanding, support, guidance) and narcissistic wishes (admiration, prestige, status). Sociotropic persons therefore seek to establish secure interpersonal relations to bolster low self-esteem (Beck, 1983). These individuals are thought to be excessively invested in positive exchanges with other people, and they are argued to have heightened needs for acceptance, understanding, support, and guidance. When their relationships fail, they

become depressed and can be identified by their preoccupation with themes of loss and abandonment (Coyne, 1995). Thus, for highly sociotropic persons, depression is most likely to occur in response to perceived interpersonal loss or rejection.

In contrast, the personality dimension autonomy refers to the person's investment in preserving and increasing their independence, mobility, and personal rights; freedom of choice, action and expression; protection of their domain; and attaining meaningful goals. These individuals are concerned with the achievement of internalised standards and goals and become self-critical when thwarted. Highly autonomous, achievement-oriented persons are very concerned about the possibility of personal failure and often act in order to maximize their control over the environment and thereby to reduce the probability of failure (Robins, 1990). Autonomous individuals have internalised standards or goals that are often higher than the conventional norms. According to Beck (1983), when these individuals fail to achieve their goals, or if they experience events that represent a perceived loss in a domain that has particular meaning or relevance to them, they become depressed and can be identified by their tendency to ruminate on feelings of inadequacy and personal failure in response to their feelings of failure or lack of control over the environment.

A review of the literature showed some studies considered earlier life behaviours or problems in the development of PTSD. Research (e.g., Helzer, Robins & McEvoy,1987) found that having PTSD following a stressor was predicted by a history of behavioural problems similar to those exhibited in conduct disorder before the age of fifteen. Similarly, Kulka et al. (1990) found Vietnam veterans experiencing significant combat exposure differed from other veterans and civilians on a number of psychological background variables including the diagnosis of antisocial personality

disorder before the age of eighteen. However, conflicting results were found in a later study by Breslau, Davis, Andreski, and Peterson (1991) who collected detailed information about exposure to traumatic stressors, family history and prior psychiatric history in a large community of people in their 20s. This research showed anxiety disorders were the primary disturbance associated with increased vulnerability to PTSD, whereas early conduct disorder, a history of alcohol or drug abuse, and a family history of psychiatric disorder were not significant vulnerability factors.

A review of the literature revealed articles that examined the two personality dimensions, sociotropy and autonomy, in studies of a variety of psychological and psychiatric problems including older people with dementia (Hilton, Clare, & Moniz-Cook, 2004), interpersonal and work adjustment (Campbell, Kwon, Reff, & Williams, 2003), personality disorder (Morse, Robins, & Gittes-Fox, 2002), couple functioning (Lynch, Robins, & Morse, 2003), and eating disorders (Friedman & Whisman, 1998; Narduzzi & Jackson, 2002).

A review of the literature on psychiatric disorders, especially clinical depression, revealed a large body of research that has focused on the importance of personality characteristics. Various psychological paradigms support the existence of two psychological processes in depression, based on the underlying personality characteristics of sociotropy and autonomy (e.g. Arieti & Bemporad, 1980; Beck, 1983; Blatt, Quinlan, Chevron, McDonald, & Zuroff, 1982; Blatt & Zuroff, 1992; Bowlby, 1980; Coyne & Whiffen, 1995; Nietzel & Harris, 1990; Pilkonis, 1988).

It was therefore postulated that a person having either a sociotropic or an autonomous personality influences their vulnerability to the loss or threat posed by specific kinds of stressful experiences (Blatt, Conrell, & Eshkol, 1993): for highly

sociotropic individuals, depression is likely to occur in response to perceived interpersonal loss or rejections, whereas highly autonomous, achievement oriented persons are more likely to become depressed when faced with life events that carry the implication that they have failed to achieve their goals or when there is a loss of control over their environment.

In an early study, Robins (1988) tested Beck's (1983) hypothesis that depressive symptoms occur when an individual experiences a negative life event that specifically matches the individual's personal motivational vulnerability. In this particular study, Beck's hypothesis that autonomous persons are susceptible to stressful life events where the implication that they have failed to exercise control over their environment or to achieve their goals was not supported. Participants were asked to complete measures of depression level, recent life events, and sociotropic and autonomous achievement motivations to test whether depression levels in students would be associated with interactions between specific personality characteristics (sociotropy and autonomy) and the occurrence of specific life events. The researchers predicted that depression would be associated with the interaction of a high level of (a) sociotropy in combination with a high frequency of negative social events and (b) autonomy in combination with a high frequency of negative autonomous achievement events. They found that participants who reported a higher frequency of recent negative social events were more likely to have more symptoms of depression if they were also high in sociotropy. This can be compared to autonomy, which was not significantly related to depression level, and there was no evidence to support that autonomy was a vulnerability factor for specific negative events. Robins (1988) concluded that the results suggested that autonomy might even serve as an event

buffering role: subjects who reported many negative social-related events, were more likely to be depressed whereas this relationship was reversed among highly autonomous achievement-oriented participants. However, the author conceded the study had major methodological limitations including the use of the less than optimal Autonomy Scale from the Sociotropy and Autonomy Scale (SAS) by Beck, Epstein, Harrison, and Emery (1983).

In their study of depression, Hammen, Ellicott, Gitlin, and Jamison (1989) followed sociotropic and autonomous depressed patients for 6 months after remission or after they had reached their best clinical state. Results of their study showed that onset or exacerbation of depressive symptoms was associated with subjects' experience of more threat from events that were congruent with their predominant personality dimension (sociotropy or autonomy) than from events that were incongruent with it. These results were supported by similar findings at a longer follow-up in a study by Hammen, Ellicott, and Gitlin (1989).

It has also been hypothesized that somewhat different symptoms of depression should be experienced by sociotropic and autonomous subjects (e.g., Blatt & Zuroff, 1992). Significant relations, for example, were found between sociotropy and expected clinical features such as optimism about treatment, responding to reassurance, variability in mood, and reactivity of mood. Autonomy was related to predicted clinical features such as loss of interest and/or pleasure, self-blame, feeling like a failure, and irritability (Robins & Luten, 1991).

The personality traits of sociotropy and autonomy have also been examined as predictors of self-generated stress (Daley et al., 1997). In a longitudinal study of 134 late adolescent women, autonomy emerged as a significant predictor of episodic

stress. Whereas the effects of sociotropy were lost when the participant's psychiatric status was accounted for, autonomy remained a significant risk factor for the occurrence of subsequent dependent and interpersonal conflict stress. The researchers concurred that autonomy is not merely an inert vulnerability factor that predisposes people to depression when coupled with an achievement-related stress, but that it also has its own effect on the generation of episodic life stress. However, this study had many limitations including that the participants were all female, high school graduates, many of who were boarding at college. The results therefore cannot be generalized to men, other age groups, or individuals living in different circumstances. Other researchers examined the relationship between sociotropy, autonomy and trait anxiety and found that scores on sociotropy were positively correlated with rated trait anxiety in situations of 'social evaluation, 'physical danger', and 'ambiguous situations', whereas scores on autonomy were positively correlated with rated trait anxiety in 'daily routines' (Sato, McCann, & Ferguson-Isaac, 2004).

Interestingly, a review of the literature could locate only one article (Kolts, Robinson, & Tracy, 2004) that examines the relationship between sociotropic and autonomous personality styles, and PTSD. The study by Kolts et al. built upon earlier research that investigated associated cognitive structures and beliefs in the development and maintenance of PTSD (e.g., Foa & Rothbaum, 1998; Foa, Tolin, Ehlers, Clark, & Orsillo, 1999; Janoff-Bulman, 1992; Owens & Chard, 2001; Resick & Schnicke, 1992). The process of traumatisation has been linked with the shattering of cognitive schemas or core assumptions (Wenninger & Ehlers, 1998) in survivors who are unable to adapt, and is based on the ways in which traumatized individuals assign meaning to themselves and to the world around them. The role of cognitive

rigidity prior to traumatic events was highlighted by Foa and Rothbaum (1998) who suggested individuals with extreme beliefs about themselves and their world in either a positive (e.g., "bad things never happen to good people") or negative direction (e.g., "I am helpless") are more vulnerable to the development of PTSD, and that successful treatment of PTSD would involve correction of such beliefs.

The basis of the study by Kolts, Robinson, and Tracy (2004) was to examine if the personality constructs, sociotropy and autonomy, might predispose individuals to experience exaggerated posttraumatic cognitions thus making them more vulnerable to the development of PTSD. The earlier work of Beck (1983) suggested sociotropy and autonomy represent risk factors for depression, and this has been supported particularly for sociotropy (e.g., Clark, Beck & Brown, 1992; Nietzel & Harris, 1990, Sato & McCann, 1997). The results of the Kolts et al. (2004) study showed that both sociotropy and autonomy were significantly related to symptoms of PTSD and depression, and they significantly improved prediction of PTSD symptom levels after controlling for the effects of depression. In addition, their results showed PTSD symptoms were significantly related to personality styles that overemphasized either the role of personal relationships or autonomous achievements in determining personal satisfaction. However, the study had many limitations as it was based on retrospective, self-report questionnaire data, and all participants were college students therefore limiting the generalizability of the findings to non-college populations.

This thesis examines the role of personality factors, namely sociotropy and autonomy, in the development of PTSD. These personality dimensions were selected because they have been identified as vulnerability factors in research on the development of depression disorders, and have been shown to be significant in the

development of PTSD in the only published article (Kolts, Robinson, & Tracy, 2004). In addition, this thesis will also investigate the capacity to predict group membership from scores on symptoms of ASD.

ASD Symptoms as Predictors of PTSD

More recently, studies of PTSD have investigated the diagnosis of ASD and its component symptoms in predicting the outcome of PTSD. In their study of 157 victims of violent assault, Brewin, Andrews, Rose and Kirk (1999), for example, found an overall diagnosis of ASD correctly classified 83% of the group with a diagnosis of PTSD. They also found that similar predictive power could be achieved by classifying the ASD and PTSD groups according to the absence or presence of at least three re-experiencing or arousal symptoms. Logistic regression showed that a diagnosis of ASD and high levels of reexperiencing or arousal symptoms contributed independently to the prediction of PTSD. In a further study of physical assault victims (Elklit & Brink, 2004), 56% of PTSD variance was explained by previous lifetime shock due to a traumatic event happening to someone close, threats during the assault, and dissociation. The inability to express feelings, hypervigilance, impairment, and hopelessness explained another 15% of PTSD variance, and the dissociative, the reexperiencing, the avoidant, and the arousal criteria of the ASD diagnosis correctly classified 79% of the subsequent PTSD cases.

The DSM-IV persistent avoidance diagnostic criteria variable for PTSD (Criteria 3) 'inability to recall an important aspect of the trauma' was examined in an investigation of survivors of motor vehicle accidents (Harvey, Bryant, & Lang, 1998) where it was found that, after the influence of depression was controlled, participants with ASD reported fewer specific memories to positive cue words than did non-ASD

participants. When the same participants were assessed for PTSD at 6-months post trauma, it was found that poor recall of specific memories of the trauma accounted for 25% of the variance of PTSD severity. Similarly, peri-traumatic dissociation and ASD symptoms were correlated with later PTSD symptoms and diagnosis in a study of 35 assault victims by Birmes et al. (2003) where findings showed peri traumatic dissociation and ASD symptoms accounted for 33% of the variance in PTSD symptoms thus supporting earlier findings that peri traumatic dissociative experiences and acute stress are robust predictors of PTSD. The authors of the above studies postulate that a person's ability to recall memories of the traumatic event in the acute post trauma phase, together with a diagnosis of ASD, may be of use for identifying at an early stage those individuals at highest risk of remaining symptomatic and who may go on to have a diagnosis of PTSD. There were, however, conflicting results for patients admitted to a trauma centre following life-threatening events where initial dissociative reactions and a diagnosis of ASD were not significant in predicting PTSD (Mellman, David, Bustamante, Fins, & Esposito, 2001). What was found was that early symptoms of heightened arousal and coping with disengagement were the independent predictors of PTSD severity at follow-up.

Thus the ASD diagnosis as a predictor of subsequent development of PTSD remains controversial. In particular, several researchers have questioned the inclusion of dissociation symptoms in the ASD diagnosis and suggest that the ASD criteria do not adequately capture all individuals who are at risk of developing PTSD. In their study of the relationship between ASD and PTSD in motor accident survivors, Bryant and Harvey (1998), for example, indicated that only a subset of ASD symptoms was strongly related to the development of chronic PTSD, and it was suggested that the

dissociative clusters required revision. Although Harvey and Bryant note that while ASD is highly predictive of subsequent PTSD, subthreshold PTSD (typically ASD without dissociative symptoms) is also a good predictor of PTSD. The reason for this is that some individuals at risk for PTSD do not develop the acute dissociative symptoms and therefore do not ever meet the criteria for ASD.

Similar results were found in an Australian prospective longitudinal study by Creamer, O'Donnell and Pattison (2004) who investigated the relationship between ASD and the subsequent development of PTSD in a population of severely injured and hospitalised trauma survivors. Their findings showed that although all ASD symptom clusters contributed to the prediction of PTSD severity, logistic regression indicated that only arousal and re-experiencing the traumatic event predicted a categorical PTSD diagnosis. Further, the dissociative symptoms of ASD were rarely endorsed and showed high specificity but low sensitivity, which resulted in a high proportion of false negative diagnoses of PTSD.

Unlike the above participants who had been assaulted, or those involved in events such as accidents, a group of patients who had a diagnosis of ASD and PTSD following cancer (head, neck or lung) were investigated by Kangas, Henry and Bryant (2005). The ASD symptoms of emotional numbing, a sense of reliving the experience, and motor restlessness were shown to be the best predictors of subsequent PTSD. They considered that as numbing has been conceptualised as a compensatory reaction to hyper arousal (Foa, Zinbarg, & Rothbaum, 1992); it appeared that initial symptoms involving hyperarousal were significant in predicting PTSD. Accordingly, the predictive power of emotional numbing, a sense of reliving the experience, and motor restlessness support the biological models that propose that PTSD is strongly

mediated by intense fear conditioning and hyper arousal reactions after trauma exposure (e.g., Davis, 1992; LeDoux, 2000; Southwick, Bremner, Krystal & Charney, 1994; Yehuda, 1998;Yehuda, McFarlane, & Shaley, 1998). However, Kangas et al. (2005) acknowledge their study was limited by methodological factors such as a small sample size, 50% attrition during follow-up, and that findings do not necessarily generalize to other cancer or nonmedical trauma populations.

This thesis replicates earlier studies by comparing the two groups of participants (those with ASD who do not go on to have PTSD, and those with PTSD) to establish if the groups differ on ASD symptoms and, if there is a difference, identify those component symptoms of ASD that predict the outcome of PTSD.

Objectives of Present Research

Despite the fact that human beings appear to have known about psychological response to trauma for thousands of years, it was not until 1980, with the advent of DSM-111 that PTSD was formally recognized. Since that time, the study of traumatic sequelae across different populations and types of traumatic exposure has increased dramatically in recent years, with a burgeoning published literature with particular reference to diagnostic issues, theoretical conceptualisations, and psychological treatment. Of particular interest has been the search for factors that explain why some people who are exposed to traumatic stress develop PTSD whereas others similarly exposed do not, as the epidemiological literature has made clear that PTSD is not an inevitable result of exposure (Ozer, Best, Lipsey, & Weiss, 2003).

The objectives of the present study were to examine the relationship between traumatic life events, quantity and quality of social supports, the personality factors sociotropy and autonomy, and the capacity to predict group membership (ASD,PTSD)

from scores of symptoms of ASD. The study evolved partly from the theoretical psychosocial model of PTSD (e.g.,Green, Wilson, & Lindy, 1985; Joseph, Williams, & Yule, 1997) which takes into account the recovery environment in which a person experiences and attempts to recover from a traumatic event. The study expands earlier research of social support and PTSD (e.g., Afflick, Tennen, Urrows, & Higgins, 1994; DeLongis, Folkman,& Lazarus, 1988; Eustace, MacDonald, & Long, 1999; Ganster & Victor, 1988; Ogden & Mtandabari, 1995; Turner, Cobb, & Steptoe, 1996; Solomon, Mikulincer, & Hobfoll, 1986; Tyler & Cushway, 1995) by examining the significance of the type, quantity, and perceived satisfaction with the support provided following a traumatic event. There is no theoretical model of the development of PTSD which takes into account personality factors. Therefore, the study was based upon and expanded the recent, and the only published, research that explores the relationship between the personality characteristics sociotropy and autonomy and the development of PTSD.

The treatment of disorders following traumatic events occupies an increasingly important place in psychological practice. It was expected that results from the current project would provide useful information for the development of preventive interventions that could be tailored to specific types of individuals, which seems particularly important given evidence that some of the most commonly used preventative interventions for PTSD, most notably critical incident stress debriefing, appear helpful for some individuals and iatrogenic for others.

Overall it was expected that:

1. Patients with a higher quantity of support (the number of people they can count on to be dependable when they need help, help them feel more relaxed, accept them

totally, care about them, help them feel better, and console them) would be less likely to go on to have PTSD than patients with fewer people to provide them with support. This hypothesis arises because of the consistency of findings that the quantity of social support is related to health outcomes following a traumatic event (e.g., Affleck, Tennen, Urrows, & Higgins, 1994; Cohen & Wills, 1985; DeLongis, Folkman, & Lazarus, 1988; Ogden & Mtandabari, 1995; Solomon, 1993; Solomon & Nekel, 1998; Turner Cobb, & Steptoe, 1996; Tyler & Cushway, 1995). However, conflicting results have been found in other studies where it was not the quantity but the quality of social support that best attenuates the negative impact of exposure to trauma (e.g., Eustace, MacDonald & Long, 1999). Therefore, the current study examined this hypothesis to establish if the quantity of support is significant in preventing participants going on to have a diagnosis of PTSD.

2. Patients with perceived satisfaction with the quality of support provided are less likely to go on to have PTSD than those patients who are less satisfied with the quality of their support. This hypothesis arises because there is limited literature on the matter and it needs to be ascertained whether the findings of Eustace, MacDonald and Long, (1999) and Turner, Cobb and Stepcoe (1996) can be replicated in an Australian sample. Findings would have implications for practice, where the provision of a social support system after a traumatic event could encourage or facilitate coping and recovery behaviours.

3. Those patients who have elevated scores on sociotropy and autonomy are more likely to go on to have a diagnosis of PTSD. This hypothesis arises because of the relationships between psychiatric disorders, especially depression, and the underlying personality characteristics of sociotropy and autonomy that has been shown in a large

body of research (e.g., Arieti & Bemporad, 1980; Beck, 1983; Blatt, Quinlan, Chevron, McDonald, & Zuroff, 1982; Blatt & Zuroff, 1992; Bowlby, 1980; Coyne & Whiffen, 1995; Nietzel & Harris, 1990; Pilkonis, 1988). There has only been one study that has specifically examined the sociotropy, autonomy and PTSD relationship showing the existence of the links (Kolts, Robinson, & Tracy, 2004). The participants in the Kolts et al.study were American. The aim of this hypothesis was to clarify and confirm the relationship between sociotropy, autonomy and PTSD found by Kolts et al. and to establish if there are similar findings in a sample of participants from Victoria, Australia.

4. High scores of the ASD symptoms of re-experiencing, arousal, avoidance, and dissociation will significantly contribute to the prediction of PTSD. This hypothesis was raised to clarify the relationships between ASD symptoms and PTSD outcomes. Earlier studies have shown the predictive power of ASD re-experiencing symptoms and PTSD (e.g., Brewin, Andrews, Rose, & Kirk, 1999; Creamer, O'Donnell, & Pattison, 2004; Elklit & Brink, 2004), ASD arousal symptoms and PTSD (e.g., Brewin, Andrews, Rose, & Kirk, 1999; Creamer, O'Donnell, & Pattison, 2004; Elklit & Brink, 2004; Mellman, David, Bustamante, Fins, & Esposito, 2001), ASD avoidance symptoms and PTSD (e.g., Elklit & Brink, 2004; Harey, Bryant, & Lang, 1998), and ASD disassociation symptoms and PTSD (e.g., Birmes, Brunet, Carreras, Ducasse, Charlet, Lauque, Sztulman, & Schmitt, 2003; Elklit & Brink, 2004). The current study confirms which group of ASD symptoms are predictive of an outcome of PTSD. It also confirms the presence of these relationships and thus to assist in the treatment of people with ASD so that fewer go on to have PTSD.

In addition to investigation of the formal hypotheses, a series of multiple regressions and a discriminant function analysis were conducted to address two further research questions namely:

1. Can PTSD symptoms of re-experiencing, avoidance, and arousal be predicted from scores of sociotropy and automony, symptoms of ASD, and measures of social support.

2. Can those participants who go on to develop PTSD be distinguished from those who do not develop PTSD on the basis of sociotropy and autonomy, symptoms of ASD and measures of social support.

CHAPTER 2

Method

Participants

Participants were from one initial group of patients recruited following a traumatic event, from the private practices of two psychologists who practice in Victoria (Lilydale and Geelong). Patients were invited to participate and those who volunteered were given the Explanatory Letter (Appendix A) describing the research, and asked to complete the Questionnaire (Appendix B). They were advised that their participation would be anonymous, and they were given a stamped, self-addressed envelope in which to return the completed questionnaire to the researcher. The patients later formed two groups. Group 1 (Time 1) was made up of those participants who met the criteria for a diagnosis of ASD (Appendix C) following the Acute Stress Disorder Interview (Appendix D) and administration of the Acute Stress Disorder Scale (Appendix E). Participants in Group 2 were those of Group 1 who were followed up after 4 weeks (Time 2) and were shown to have gone on to have a clinical diagnosis of PTSD according to diagnostic criteria for 309.81 post traumatic stress disorder (Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, American Psychiatric Association, 1994) (Appendix F) after they had been assessed by the clinical-administered PTSD scale (CAPS) (Appendix G). The patients were treated by the two psychologists during the month between the ASD and PTSD diagnosis, but no record was provided of the amount or type of treatment. Referrals to the two psychologists came from a wide range of sources, including general practitioners, police, solicitors, and the Victims of Crime Assistance Service, and also self-referrals. The patients had been involved in a wide range of traumas: for the PTSD group, the events included being a witness to murder, road traffic accidents

(fatal and non-fatal), domestic violence, work injuries (physical and psychological), assault (physical, sexual, and with gun), and a victim of armed robbery. The events experienced by the ASD group included road traffic accidents (non-fatal), other accidents (home, farm), work injuries (physical, psychological), assault (physical, sexual), home invasion, and witnessing a death.

Measures

Diagnostic Measures

Acute stress disorder interview (ASDI). The ASDI was chosen as the diagnostic tool for the two psychologists to administer to patients to confirm the diagnosis of ASD (Time 1). The ASDI was developed by Bryant, Harvey, Dang and Sackville (1998) in response to the introduction of the diagnosis of Acute Distress Disorder in DSM-IV (American Psychiatric Association, 1994) during 1994. The new diagnosis of ASD was introduced as an attempt to identify people at risk of developing PTSD, and this raised the need for standardized instruments to measure ASD. According to Bryant (2000), the main obstacle to the study of ASD was the lack of sychometrically sound assessment tools.

Researchers (e.g., Bryant, Harvey, Sackville, Dang, & Basten, 1998) have found that early treatment of trauma survivors with ASD can effectively prevent PTSD in many cases. To meet the criteria for ASD, one must experience a stressor and respond with fear or helplessness, have at least 3 of 5 dissociative symptoms, at least one re-experiencing symptom, as well as experiencing marked avoidance, and marked arousal (Bryant & Harvey, 1997; Bryant & Harvey, 1998; Bryant, Harvey, Dang, & Sackville, 1998; Bryant & Harvey, 2000).

The ASDI is a structured clinical interview that contains 19 dichotomously scored items that relate to the DSM-IV criteria. It consists of 8 criterion which include: thoughts and feelings at the time of the event; emotions and awareness since the event; intrusive thoughts or memories about the event; attempts at avoiding memories of the event; possible reactions since the event (sleeping difficulties, irritability, problems with concentrating, hypervigilance, startled response, physiological changes e.g. sweating, trembling, increased heart rate when reminded of the event); difficulties experienced with normal socializing, talking with people, doing normal work; use of medication, drugs or alcohol and any medical conditions experienced at the time or since the event; and duration of the symptoms reported in the criteria. A comparison of the ASDI and the Acute Stress Disorder Scale (ASDS) to predict PTSD 6-months post-trauma showed the reported sensitivity and specificity of the ASDI is greater than 90% which is comparable to the current findings with the ASDS. The rate of false positive identifications of the ASDI has been between 18% and 22%, compared to the current rate of 56% when the ASD diagnostic cut-off is adopted, and 33% when the ASDS total score cut-off is adopted (Harvey & Bryant, 1998). Thus, the structured interview was more effective than the ASDS in filtering out those acutely distressed individuals who did not subsequently suffer persistent PTSD. According to Bryant (1999), this pattern is consistent with proposals that structured interviews are more effective tools than self-report measures. Further, Bryant (1999) suggests that self-report measures of acute stress reactions should be interpreted cautiously.

The ASDI was chosen for this study because of its sound psychometric qualities. It has been shown to possess sound test-retest reliability over a period of 2 to 7 days ($r = 0.95$), to have good sensitivity (91%) and specificity (93%) compared to

independent clinical diagnosis, and has been shown to successfully predict subsequent PTSD (Bryant, 1999).

Acute stress disorder scale (ASDS). The ASDS is a self-report version of the Acute Stress Disorder Interview (ASDI) developed by Bryant (1999) to permit identification of those acutely traumatised individuals who are at risk of developing PTSD and to provide opportunities for early intervention. The ASDS has been shown to predict 91% of those who subsequently develop PTSD and 93% of those who do not (Bryant, 2000). The introduction of the new diagnosis during 1994 raised the need for standardized instruments to measure ASD. Prior to the development of the ASDS, the only measure that had been subjected to standard psychometric study was the Acute Stress Disorder Interview (ASDI). An earlier self-report measure of ASD is the Stanford Acute Stress Reaction Questionnaire (SASRQ) by Cardena, Classen, and Spiegel (1991), a 30-item inventory that indexes ASD symptoms. However, there is a lack of available data to support its suitability in identifying individuals who meet ASD diagnostic criteria or who subsequently satisfy PTSD criteria. The aim of Bryant (1999) was to develop a self-report measure that would provide (a) identification of ASD, (b) a self-report version of the ASDI, and (c) a predictor of subsequent PTSD. According to Bryant, Moulds and Guthrie (2000), the ASDS was also developed because structured clinical interviews are often not feasible in the aftermath of large scaled disasters. The item content of the ASDS and ASDI are identical because the items for each were generated through the same process, and the ASDS was designed to be a self-report version of the ASDI.

The ASDS is a 19-item inventory that is based on the DSM-IV (American Psychiatric Association, 1994) diagnostic criteria for 308.3 acute stress disorders. The

19 items that comprise the ASDS include five dissociative symptoms (during or after the trauma, did you ever feel numb or distant from your emotions; during or after the trauma, did you ever feel in a daze; during or after the trauma, did you feel distant from your normal self or like you were watching it happen from outside; have you been unable to recall important aspects of the trauma); four re-experiencing symptoms (have memories of the trauma kept entering your mind; have you had bad dreams or nightmares about the trauma; have you felt as if the trauma was about to happen again; do you feel upset when you are reminded of the trauma); four avoidance symptoms (have you tried to not think about the trauma; have you tried not to talk about the trauma; have you tried to avoid situations or people that remind you of the trauma; have you tried not to feel upset or distressed about the trauma); and six arousal symptoms (have you had trouble sleeping; have you felt more irritable; have you had difficulty concentrating; have you become more alert to danger; have you become jumpy since the trauma; and when you are reminded of the trauma, do you sweat or tremble or does your heart beat faster). The wording of the ASDS differs from the ASDI in that items on the ASDS are phrased in order to facilitate self-report responses. The ASDS requires respondents to rate the extent to which each symptom is present on a 5-point scale (ranging from 1 = not at all, 5 = very much) and is scored by summing the scores for all items.

The ASDS has demonstrated reasonable internal consistency, convergent validity, and test-retest reliability in research by Bryant, Moulds and Guthrie (2000). Internal consistency was indexed by calculating alpha coefficients for the ASDS total score and for each of the symptom clusters. Alpha was .96 for the ASDS total score, .84 for dissociation, .87 for re-experiencing, .92 for avoidance, and .93 for arousal.

Comparing the items against existing measures of dissociation, re-experiencing, avoidance, and arousal symptoms tested the convergent validity. The convergent validity was then evaluated by comparing the total scores of the dissociative, re-experiencing, avoidance, and arousal clusters with psychometrically sound measures of dissociation, re-experiencing, avoidance, and arousal (the ASDI, Impact of Event Scale, Beck Anxiety Inventory). Strong test-retest correlation coefficients for the dissociation (.85), re-experiencing (.94), avoidance (.89), and arousal (.94) clusters were found. The cut-off score was able to identify 95% participants who were diagnosed with ADS on the ASDI and 83% of those who were not diagnosed with ASD. There was, however, limited success in predicting PTSD. Although the ASDS cut-off correctly identified 91% of people who developed PTSD and 93% of those who did not develop PTSD, one third of the participants who scored over the cut-off did not develop PTSD. Accordingly, Bryant, Moulds and Guthrie (2000) concluded that the ASDS should be supplemented by clinical assessments to more accurately identify acutely traumatized individuals who are at risk of developing PTSD.

The alpha levels in the present study were satisfactory for scales of that length, although lower than those of the normative study by Bryant, Moulds and Guthrie (2000). The overall alpha scale was .85, and .65 for dissociation, .64 for re-experiencing, .70 for avoidance, and .73 for arousal. Examination of the inter item correlations showed that if 2 items had been deleted, this would have raised the overall alpha marginally and also would have made a slight improvement for the dissociation scales. However, given the size of the sample, it was decided not to restrict the amount of information by dropping specific items.

The data generated from responses on the four symptom groups of the ASDS was used in the current study to test the hypothesis that the ASD symptoms of re-experiencing, arousal, avoidance, and dissociation will significantly contribute to the prediction of PTSD.

Clinician-administered PTSD scale (CAPS). The CAPS, developed by Blake, Weathers, Nagy, Kaloupek, Charney and Keane (1998) was chosen as the diagnostic tool for the two psychologists to administer to patients to confirm the diagnosis of PTSD (Time 2). The CAPS is a structured clinical interview designed to assess individuals over the age of fifteen for the seventeen symptoms of PTSD outlined in DSM-IV. Other conditions cause many of the symptoms experienced in PTSD, including adjustment disorder, depression, panic disorder, and substance abuse or dependence disorder, and these must be ruled out. Questioning throughout the CAPS interview allows for gathering of details about the trauma and assessment of current and past levels of functioning. Prior versions of the CAPS (CAPS-1 and CAPS-2) were designed to assess, respectively, current or lifetime PTSD status or PTSD symptoms, over the previous week (Blake, Weathers, Nagy, Kaloupek, Klauminzer, Charney & Keane, 1990). The current version of CAPS, used in this study, incorporates each of the previous versions' features. The CAPS provides a means to evaluate self-reports of exposure to potential Criterion A events; current and/or lifetime DSM-IV diagnosis of PTSD; the frequency and intensity of each symptom; the impact of the 17 PTSD symptoms on social and occupational functioning; and the overall severity of PTSD.

The CAPS consists of standardized prompt questions and supplementary follow up (probe) questions that target DSM-IV criteria for PTSD without leading the

respondent. There are also behaviourally anchored 5-point rating scales corresponding to the frequency and intensity of each symptom assessed. The items assess core PTSD symptoms and related issues: re-experiencing symptoms, avoidance and numbing symptoms, hyper arousal symptoms, trauma-related guilt, dissociation, subjective distress, functional impairment, onset, duration, symptom severity, symptom improvement, response validity. The scale also offers a 17-item Life Events Checklist that can be completed by the patient to help identify precipitating traumatic events.

The authors of CAPS claim that before their development of the scale, PTSD diagnostic interviews contained limitations as to their reliability and validity, so they specifically attempted to overcome these limitations with their new instrument. The CAPS has undergone several revisions due to both user feedback and changes in the diagnostic criteria of PTSD (Blake et al., 1995).

The CAPS has gained international acceptance because it is easy to use and has shown to be a PTSD instrument whose measures tend to exhibit sound psychometric properties. Test-retest reliabilities for the 30 symptom cluster ranged from .77 - .96, and ranged from .90 -.98 for the 17 item core symptom scale (Weathers, Keane, & Davidson, 2001); inter-rater reliability for total score was .89 (92.5% agreement); and for the subscales: experience .86 (88.5% agreement), avoidance .81 (93.4% agreement), and arousal .95 (86.6% agreement) (Foa & Tolin, 2000); co-efficient alpha for the 3 symptom clusters ranged from .85 - .87; total score alpha was .94; total CAPS current intensity scores had a coefficient alpha of 0.89; alpha was 0.63 for the intrusive items, 0.78 for the avoidance and numbing items, and 0.79 for the hyper

arousal items (Blake et al. 1995). The CAPS was strongly correlated with the Structured Clinical Interview for DSM-IV (SCID) and the PTSD Symptom Scale-Interview (PSS-1). The diagnosis of PTSD based on the CAPS, an interview-based measure, and a self-report measure (PTSD Symptom Checklist) were all significantly associated (Mueser, Salyers, Rosenberg, Ford, Fox & Carty, 2001).

The CAPS was chosen for this study because it is regarded by the American National Centre for Post-Traumatic Stress Disorder as the gold standard tool for PTSD assessment and diagnosis for both military and civilian trauma survivors.

Social Interaction Measures

Social supports questionnaire – short form (SSQ-6). The SSQ-6 by Sarason, Shearin and Pierce (1987) was used to measure the amount of, and perceived satisfaction with, social support. The SSQ-6 is an abbreviated instrument derived from the 27-item Social Support Questionnaire (SSQ: Sarason, Levine, Basham, & Sanason, 1983) in response to the need for rapid assessment in clinical settings. The SSQ-6 yields scores for the perceived number of social supports (network size) and satisfaction with social support that is available within that network. The questionnaire consists of two parts with six questions in each. The first part is where respondents list the number of individuals who provide the type of support inquired about in each question (SSQ-N), and the second part is for rating satisfaction with support from the network (SSQS). Types of support inquired about include "who can you really count on to be dependable when you need help" and "who accepts you totally, including both your worst and your best points". Two scores are obtained for each question: a total number of supports from 0 – 9 for possible members of the support network (range = 0 – 54). In part two, the participants are asked to rate their

satisfaction with the social support available on a scale ranging from (6) 'very satisfied' to (1) 'very unsatisfied' (range = 6-36).

The SSQ-6 has been widely used in a diverse range of studies including mothers of children with obstetrical brachial plexus injuries (McLean, Harvey, Pallant, Bartlett, Mutimer, 2004), burn out among the clergy (Nank, 2004), predicting quality of life following stroke (Mackenzie & Chang, 2002), self disclosure of HIV serostatus to significant others (Petrak, Doyle, Smith, Skinner, & Hedge, 2001), predicting depression dysphoria (Klocek, Oliver, & Ross, 1997), biopsychosocial factors in homosexual men with AIDS (Grummon, 1995), parental drinking (Bluth, 1995), and the long-term psychological effects of surviving a cyclone (Eustace, MacDonald & Long, 1999).

The SSQ-6 is reported to have high internal reliability and high correlation with the full SSQ-27 (Sarason, Shearin, & Pearce, 1987). The SSQ-6 has high internal consistency for both the number and satisfaction subscales (alphas = .90 - .93), high test-retest reliability, and a single factor accounting for the majority of the variance in each of the subscales, respectively. Validity is supported by correlations with associated constructs. For example, scores on the number of supports have positive correlations with positive life events, internal locus of control, and self-esteem. Satisfaction scores were negatively correlated with negative life events and positively correlated with self-esteem (Sarason, Shearin, & Pearce, 1987). The validity and reliability of the SSQ-6 have been well established among studies with chronic illness patients (e.g., Everett, Sletten, Carmack, Brantley, Jones, & McKnight, 1993; Kim, 1999; Kennedy, 2000), with both dimensions having good internal reliability (alpha ranging from .90 to .93) (Sarason, Shearin, & Pierce, 1987).

The SSQ-6 provided data in the current study to test the hypotheses that patients with a higher quantity of social support and with perceived greater satisfaction with the quality of the social support will be less likely to go on to have a diagnosis of PTSD than patients with fewer people to provide them with support, and who are less satisfied with the quality of social support provided.

Personality Measures

Personal style inventory-revised (PSI-11). The PSI-11 by Robins, Ladd, Welkowitz, Blaney, Diaz, and Kutcher (1994) is a 48-item self-report measure used to assess sociotropy, autonomy and their constituent subscales. The PSI-11 was chosen instead of the earlier Sociotropy-Autonomy Scale (SAS) by Beck, Epstein, Harrison and Emery (1983). Research with the SAS has provided consistent support for the validity of sociotrophy. Sociotropy , for example, was correlated with the Beck Depression Inventory (BDI) score (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and neuroticism (Gilbert & Reynolds, 1990); it appears to have an interactive relation with prior life events on the onset of depression (e.g., Robins & Block, 1988), and may be associated with specific clusters of symptoms (e.g., Robins, Block, & Peselow, 1989). However, attempts to demonstrate complementary hypotheses with autonomy had been unsuccessful (Reynolds, 1991).

The PSI-11 was designed to improve on previous questionnaires. Specifically, Robins et al. (1994) sought to address concerns that previous measures may have assessed mood states as opposed to personality factors. They reduced the numbers of items theoretically unrelated to the sociotropy and autonomy constructs and generated a large pool of items designed to measure these two constructs. Some of the items were newly created, others were drawn from existing measures. Using psychometric

criteria, the number of items was narrowed and the final version demonstrated good factor structure, internal consistency, and test-retest reliability. Construct validity was measured by correlating the PTS-11 with an earlier measure of sociotropy and autonomy, the Depressive Experiences Questionnaire (Blatt, D'Afflitti, & Quinlan, 1976).

The PSI-11 is widely used instrument that has examined the relations between sociotropy and autonomy and a diverse range of psychological disorders including major depression (e.g., Robins, Bagby, Rector, Lynch, & Kennedy, 1997), irrational beliefs in remitted depressives (e.g., Solomon, Arnow, Gotlib, & Wind, 2003), depression and anxiety (e.g., Alford & Gerrity, 2003), personality disorder (e.g., Morse, Robins, & Gittes-Fox, 2002), interpersonal and work adjustment (e.g., Campbell, Kwon, Reff, & Williams, 2003), couple functioning (e.g., Lynch, Robins, & Morse, 2003), eating disorders (e.g., Friedman & Whisman, 1998; Narduzzi & Jackson, 2002), and older people with dementia (e.g., Hilton & Moniz-Cook, 2004.

The PSI-11 consists of two 24-item scales to measure sociotropy and autonomy, which are enduring personality characteristics presumed to increase vulnerability to psychopathology. The Sociotropy Scale assesses investment in positive interchange with others and consists of three subscales: concern over what others think (7 items), dependency (7 items), and pleasing others (10 items). An example item is "I judge myself based on how I think others feel about me". The 24-item Autonomy scale measures separateness and independence from others and also consists of three subscales: perfectionism/self-criticism (4 items), need for control (8 items), and defensive separation (12 items). An example item is "I become upset when others try to influence my thinking on a problem". Participants were asked to consider the

statements about personal characteristics and to indicate whether they agree or disagree, and to what extent on the six possible scores. Each item on both scales is rated on a 6-point Likert-type scale, ranging from 1 = strongly disagree to 6 = strongly agree.

The PSI-II Sociotropy and Autonomy scales have been shown to have good factor structure, internal consistency reliability: alpha of .90 and .86 respectively and 1 to 2-month test-retest reliabilities of 80 and 70 respectively, a low correlation with each other, and weak or no gender differences (Robins, Ladd, Welkowitz, Blaney, Diaz, & Kutcher, 1994). For the present study, excellent consistency for total scores for sociotropy and autonomy scales was found (.92 and .92 respectively) as well as on the subscales: autonomy – perfectionism/self-criticism .80, need for control .75, defensive separation .87; sociotropy – concern about what others think .89, dependency .69, pleasing others .88.

In the current study, the PSI-11 will identify the participant's scores on the subscales for sociotropy (concern over what others think, dependency, and pleasing others) and autonomy (perfectionism/self criticism, need for control, and defensive separation) to test the hypothesis that those patients who have elevated scores on sociotropy and autonomy are more likely to go on to have a diagnosis of PTSD.

Descriptive Information

All participants were asked to report their age, sex, marital status, level of education, and current position or occupation. They were asked if they felt they had physically or emotionally recovered from the traumatic event and invited to provide any comments. During the initial assessment of all participants, a brief description of the traumatic event was recorded onto the questionnaire by the psychologists to gain

an idea of the degree of match in level of initial trauma in the two groups. This information was gathered in order to answer the question whether those people with ASD who did not go on to have PSTD were exposed to less severe traumas. In addition, the severity of the trauma was ranked by the psychologists and, although this was a subjective, the measure also assisted in determining whether those whose symptoms decreased and did not go on to have PTSD were exposed to less severe traumas. The ratings consisted of (1) events where the patient thought they were going to be killed; (2) events involving death (e.g., motor vehicle accidents where others were killed) and events with potential for death (e.g., serious motor vehicle accidents); (3) events where patients were physically injured, but not potentially life threatening; (4) rape, other sexual assault, acts of violence including assault requiring or not requiring hospitalisation, and domestic violence; and (5) work related events (psychological).

Procedure

Approval for the research was sought and granted from the Ethics Committee at Bond University, Queensland. Participants were those patients who had experienced a traumatic event and had been referred to the private practices of two Victorian psychologists (Geelong, Lilydale) over a period of 10 months. Only four of the total of 59 patients approached declined to participate in the study. The psychologists, using the Acute Stress Disorder Interview, assessed patients who presented within four weeks of having suffered a trauma. If they were found to have the diagnosis

ASD, they were invited to participate in the research and, if they agreed, formed Group 1 and completed the Acute Stress Disorder Scale Participants in Group 1 were re-assessed four weeks later. If it was found they had gone on to have the clinical

diagnosis PTSD, according to the diagnostic criteria for 309.81 posttraumatic stress disorder as set out in the Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition (American Psychiatric Association, 1994), they became Group 2. All those who volunteered to participate in the study were given an Explanatory Letter (Appendix 1) and asked to complete the questionnaire (Appendix 2) either at their home or in the psychologist's rooms. They were advised the questionnaire package was completely anonymous and the answers they provided would be used for the purpose of the study only. They were asked not to write their name or any identifying marks on the questionnaire to ensure anonymity. Participants were given a stamped, self-addressed envelope in which to return their questionnaire to the researcher.

CHAPTER 3

Results

The present study examined relationships between social support, sociotropic and autonomous personality styles, and acute stress disorder (ASD) symptoms as predictors of post-traumatic stress disorder (PTSD). Several hypotheses examining the contributions of these variables to and differentiating between ASD and PTSD were formulated. The following results sections outline the initial data screening that took place and then examines the hypotheses and presents the outcomes/results of the analyses.

A total of 51 participants participated in the study (ASD N=20, PTSD N=31). Chi-squares conducted to establish whether there was any difference for gender, marital status, age, education, and occupation showed there was no significant difference between the two groups. The patients had been involved in a wide range of traumas including being a witness to a murder, road traffic accidents (fatal and non-fatal), work injuries (both physical and psychological), assault (physical, sexual, and with a weapon) and armed robbery. The two groups differed in terms of the rating of the event by the psychologists. Five of the PTSD group, compared to no-one in the ASD group, were involved in an incident where they thought they were going to be killed. This can be compared with the ASD group where no-one thought they would lose their life at the time of the traumatic event. There were both six members of the ASD and PTSD group whose traumatic event involved death or the potential for death. Six of the ASD group and three of the PTSD group were injured, but there was not potential for death, and seven ASD and 13 PTSD group members were traumatized by rape, other sexual assault, and other acts of violence. Only one patient

in the ASD group was involved in a work related (psychological) traumatic event, compared to four in the PTSD group.

Social Support

Hypotheses 1 and 2, that quantity of and satisfaction with the available social support would be related to PTSD outcomes, were tested against their patterns of social support. The groups were compared on their patterns of social support to identify any differences in levels of satisfaction with social supports between those who went on to receive a diagnosis of PTSD and those who did not receive a PTSD diagnosis. The means and standard deviations for the two groups scores on the social support measures are presented in Table 1.

A one-way between-groups MANOVA was conducted to compare the two groups (PTSD Vs, Non-PTSD) on the six subscales of the numbers of social support measure (the number of people they can count on to be dependable when they need help, help them feel more relaxed, accept them totally, care about them, help them feel better, and console them). MANOVA was significant, Pillai's trace = .521, $F(6,48) = 8.72$, p , .001, $\eta^2 = .52$. At the univariate level the PTSD group scored lower than the non-PTSD group on the number of people they could count on for social support on all of the subscales (all p's <.001).

A second one-way between-groups MANOVA was conducted to compare the two groups (PTSD Vs Non-PTSD) on the six subscales of the social support satisfaction measure (the number of people they can count on to be dependable when they need help, help them feel more relaxed, accept them totally, care about them, help them feel better, and console them**)**. MANOVA was significant, Pillai's trace = .255, $F(6,48) = 2.74$, $p < .05$, $\eta^2 = .26$. At the univariate level the PTSD group scored

lower in satisfaction (reverse scored) than the non-PTSD group on all of the subscales (all *p*'s < .01).

Personality Measures

Hypothesis 3, elevated scores on sociotropy and autonomy are associated with PTSD outcomes, was tested by comparing the PTSD and non-PTSD groups on their scores on the their scores on the PSI-11. The means and standard deviations for the two groups PSI-11 scores are presented in Table 2.

A one-way between groups multiple analysis of variance (MANOVA) was conducted to compare the two groups (PTSD Vs Non-PTSD) on their total scores for sociotropy and autonomy. Overall, MANOVA showed a significant group difference, Pillai's trace = .445,$F(2,48) = 19.25$, p<.001, η^2=.45. At the univariate level, the PTSD group was found to score higher than the non-PTSD group on both autonomy ($F(1,49)= 18.43$,p<.001, η^2=.27) and sociotropy (F(1,49)=27.95, p<.001, η^2= .36).

A second one-way between groups MANOVA was conducted to compare the two groups (PTSD Vs Non-PTSD) on the six subscales of Sociotropy and Autonomy. Once again MANOVA was significant, Pillai's trace = .518, $F(6,44)= 7.88$, p<.001, η^2=.52. At the univariate level the PTSD group scored higher than the non-PTSD group on all of the sub-scales of Autonomy (all p's <.001) and on the Sociotropy scales of Concern for Others ($F(1,49)= 38.12$,p<.001, η^2=.44) and Pleasing Others ($F(1,49)=22.60$,p<.001, η^2=.32). However, although the difference was in the same direction, the group difference on the Dependency subscale of Sociotropy was non-significant ($F(1,49)=3.13$,p=.08, η^2=.06).

Symptoms of Acute Stress Disorder

Hypothesis 4 was that the ASD symptoms of re-experiencing, arousal, avoidance, and dissociation would significantly contribute to the prediction of PTSD. The groups were compared on their patterns of symptoms of acute stress disorder at the time of referral to identify any differences in symptom profile between those who went on to receive a diagnosis of PTSD and those who did not receive a PTSD diagnosis. The means and standard deviations for the two groups scores on the ASD measure are presented in Table 3.

A one-way between-groups MANOVA was conducted to compare the two groups (PTSD Vs Non-PTSD) on the four subscales of the acute stress disorder measure disassociation, re-experiencing, avoidance, and arousal). MANOVA was significant, Pillai's trace = .586, $F(4,50) = 12.78$, $p<.001$, $\eta^2 = .51$. At the univariate level the PTSD group scored higher than the non-PTSD group on all of the subscales (all p's <.001).

In summary, compared to the group of people who did not develop PTSD, the group of people who went on to obtain a diagnosis of PTSD subsequent to their traumatic experiences had fewer social supports and experienced less satisfaction with those supports, scored higher on the personality pathology of sociotropy and autonomy, and had higher levels of all types of acute stress disorder symptoms.

Relationships Among the Measures of PTSD Symptoms and Personality, Social Support and Acute Stress Disorder Symptoms for the PTSD Group

Pearson product moment correlations were conducted to examine relationships among the measures of PTSD symptoms and the personality, acute stress disorder

symptoms, and social support measures in the PTSD group. Theses correlations are presented in Table 4.

Prediction of PTSD Symptoms in the PTSD Group

Multiple regressions were used to determine the prediction of PTSD symptoms in the group of people that went on to develop PTSD. Separate multiple regressions were conducted for each of the three symptom types with Sociotropy, Autonomy, the Acute Stress Disorder symptoms and total Social Supports and Satisfaction with Social Supports entered into the model.

Prediction of PTSD Re-Experiencing Symptoms

The initial multiple regression included all the variables as predictors of PTSD re-experiencing symptoms for the people in the PTSD group (N=31). The regression explained 37.4% of the variance in re-experiencing symptoms but was non-significant (R^2= .374 $F(8,22) = 1.64$, p= .17). However, removal of non-significant predictors from the regression produced a significant level of prediction. As shown in Table 5, the acute stress symptom of arousal and the total number of social supports available accounted for 28.2% of the variance in PTSD symptoms of re-experiencing at time 2 (R^2= .282, $F(2,28) = 4.05$, $p < .01$)

Prediction of PTSD Avoidance Symptoms

The initial multiple regression included all the variables as predictors of PTSD avoidance symptoms for the people in the PTSD group (N=31). The regression explained 59% of the variance in re-experiencing symptoms and was significant (R^2= .590 $F(8,22) = 3.97$, p< ..01). Removal of non-significant predictors from the regression produced a more parsimonious model of prediction that explained 47% of the variance in avoidance symptoms. As shown in Table 6, the acute stress symptom

of arousal and dissociation accounted for 47% of the variance in PTSD symptoms of avoidance at time 2 (R^2= .470, $F(2,28) = 14.28$, $p < .001$)

Prediction of PTSD Arousal Symptoms

The initial multiple regression included all the variables as predictors of PTSD arousal symptoms for the people in the PTSD group (N=31). The regression explained 67% of the variance in re-experiencing symptoms and was significant (R^2= .672 $F(8,22) = 5.64$, $p< .001$). Removal of non-significant predictors from the regression produced a more parsimonious model of prediction which explained 64% of the variance in arousal symptoms. As shown in Table 7, the acute stress symptom of arousal and dissociation accounted for 64% of the variance in PTSD symptoms of arousal at time 2 (R^2= .638, $F(2,28) = 24.71$, $p < .001$)

Discriminant Analysis

A discriminate analysis (DFA) was conducted to determine the measures that best distinguished between the group of people who went on to develop PTSD and those who did not develop PTSD. In the initial DFA all eight variables were entered into the function as predictors. The discriminant function was significant with a Wilks lambda of .332, χ^2 (8, N=51) = 49.68, p< .001. The functions at group centroids were PTSD group 1.12 and non-PTSD group = -1.73. The standardized canonical discriminate function coefficients are presented in Table 8

When the DFA was used to classify participants in the two groups 92.2% of the original cases were correctly identified as PTSD or non-PTSD on the basis of the discriminant function. For the non-PTSD group 19 people were correctly classified and only one person was classified into the PTSD group. Of the PTSD group 28 people were correctly classified PTSD and three identified as not in the PTSD group.

Following the interpretive rules for interpreting canonical co-efficients recommended by Tabachnick and Fiddell (1996) co-efficients were interpreted as. significant if they were equal or higher than .33. Thus, sociotropy, acute stress dissociation and re-experiencing and the total number of social supports were identified as significant contributors to the discriminant function. Conversely, Autonomy, Acute Stress Avoidance, Acute Stress Arousal, and Satisfaction with Social supports were identified as non-.significant contributors to the discriminant function.

In summary, the DFA analysis established that people who went on to experience PTSD were distinguished from those who did not develop PTSD by having higher levels of sociotropy, greater amounts of dissociation and re-experiencing in the acute stress stage and lower numbers of people who they can rely upon for social support.

Table 1.
Group means and standard deviations for social support

	PTSD		NON-PTSD	
	Mean	SD	Mean	SD
Subscale score *No. of people*				
Dependable	4.67	2.51	7.21	2.02
Help to relax	2.81	1.96	5.21	2.19
Accepting	3.13	2.38	7.38	1.86
Help to feel better	3.19	2.32	7.00	2.13
Consoling	2.23	1.67	4.46	2.17
Subscale score *Satisfaction* Dependable	1.96	.98	1.38	.49
Help to relax	2.39	1.52	1.42	.58
Accepting	1.97	1.45	1.13	.34
Help to feel better	2.19	1.22	1.33	.56
Consoling	1.87	1.36	1.17	.38

Table 2.
Group means and standard deviations for sociotropy and autonomy

	PTSD		NON-PTSD	
	Mean	SD	Mean	SD
Total scores				
Sociotropy	104.97	16.51	81.97	12.90
Autonomy	98.74	18.42	76.80	17.44
Sociotropy Subscale scores				
Concern for others	30.68	6.62	20.60	3.80
Pleasing others	46.10	7.49	35.95	7.37
Dependency	28.19	5.90	25.35	5.10
Autonomy Subscale scores				
Perfection	18.80	3.78	13.50	3.61
0Need for control	32.38	6.89	25.05	6.10
Defensive separation	47.55	10.33	38.25	10.74

Table 3.
Group means and standard deviations for symptoms of acute stress disorder

	PTSD		NON-PTSD	
	Mean	SD	Mean	SD
Subscale scores				
Disassociation	19.45	3.61	14.54	2.11
Re-experiencing	16.74	3.04	13.67	2.81
Avoidance	16.39	2.80	13.63	2.53
Arousal	25.10	3.90	21.88	3.33

Table 4.
Correlations of personality, ASD and social support measures with PTSD

Variable	Re-Exp.	Avoidance	Arousal
Sociotropy	.12	.20	.05
Autonomy	.13	.06	.08
Acute Stress, Dissociation	.29	.54**	.50**
Acute Stress, Re-experiencing	.18	.46**	.50**
Acute Stress, Avoidance	.25	.31	.51**
Acute Stress, Arousal	.36*	.56*	.72*
Social Supports Total No.	-.70**	-.60**	-.31*
Social support Satisfaction	.38**	.37**	.16

Table 5.
Summary of the multiple regression analysis for PTSD group: re-experiencing as the dependent variable

Variable	β	t	p
Acute stress Arousal	.38	2.0	.05
Total social supports	-.39	2.4	.02

Table 6.
Summary of the multiple regression analysis for PTSD group: avoidance as the dependent variable

Variable	β	t	p
Acute stress Arousal	.47	3.5	.002
Acute stress Dissociation	.45	3.3	.003

Table 7.
Summary of the multiple regression analysis for PTSD group: arousal as the dependent variable

Variable	β	t	p
Acute stress Arousal	.65	5.6	.001
Acute stress Dissociation	.36	3.1	.005

Table 8.
DFA predictors and standardized cannonical discriminant function co-efficients for the PTSD and non-PTSD groups

Variable	Standardized canonical Co-efficient
Sociotropy	.40
Autonomy	.07
Acute Stress, Dissociation	.41
Acute Stress, Re-experiencing	.41
Acute Stress, Avoidance	-.09
Acute Stress, Arousal	.06
Social Supports total	-.54
Social support Satisfaction	.07

CHAPTER 4

Discussion

Social Support in the Development of PTSD

Several important points emerge from the study, and the present discussion is focussed on the issues addressed by the objectives and hypotheses. Firstly, the study aimed to provide further information as to the relationship between PTSD and the perceived numbers of persons who provided social support, and satisfaction with the support provided to persons following a traumatic event. Considerable attention has been given in the research literature since the 1970s to the importance of social support, especially following the high reported rates of PTSD in soldiers who experienced hostility when they returned home from serving in Vietnam. A review of the research literature has shown a consistency in the findings that there is a positive relationship between the provision of social support and mental health outcomes, and a negative relationship for those with low psychosocial resources (e.g., DeLongis, Folkman, & Lazarus, 1988), although there was little agreement over which facet of social support was the most important and in which contexts(e.g. Cook & Bickman, 1990; Solomon, Smith, Robins, & Fishback, 1987).

As hypothesized (Hypothesis 1), the data of the present study showed those patients who reported a higher number of people to support them on each of the social support variables (the number of people they could count on to be dependable when they need help, help them feel more relaxed, accept them totally, care about them, help them feel better, and console them) following their traumatic event/s were less likely to go on to have PTSD than patients with fewer people to provide support. In fact, those in the ASD group perceived themselves as having almost double the number of people to provide them with support thus confirming and adding to the

literature the positive relationship between the provision of social support and mental health outcomes. They particularly felt they had more people they could depend on when they needed help, who totally accepted them (both their worst and best points) and cared for them (regardless of what was happening to them). However, they perceived themselves as having fewer people they could count on the help them feel more relaxed when they were under pressure, to help them feel better when they were down in the dumps, and to console them when they were upset.

The findings from this study confirm those of earlier research (e.g., Turner, Cobb, & Stepcoe, 1996) that indicated that support network size is a moderator of PTSD. The results, in part, add support to the psychosocial model of the development of PTSD proposed by Green, Wilson and Lindy (1985) that takes into consideration the recovery environment in which the person experiences and attempts to recover from the traumatic event. The findings also add support to the information-processing models of PTSD (e.g., Howowitz, 1986; Foa, Steketee, & Rothbaum, 1989; Resick & Schnicke, 1992) that include the importance of social factors such as strong, positive support to protect against the development of PTSD. According to these theories, effective recovery is facilitated by emotional support and, in particular is also facilitated by the opportunity to talk with supportive others about emotions connected with the traumatic event during the working through phases. The process of working through (talking about the traumatic event and its related emotions, and getting information) voluntarily activates the memory networks and allows the experience to be assimilated. The data of the present study also show that patients who were more satisfied with the perceived quality of social support provided following their

traumatic experience were less likely to go on to have PTSD than those patients who are less satisfied with the quality of their support (Hypothesis 2). These findings support the argument of Cohen and Wills (1985) who assert that it is the perceived quality of support that is important when people experience stress. However, current findings dispute the assertion that the perceived quality is more important than perceived quantity as both of these variables were more highly endorsed in the present study by those of the ASD group. Similarly, findings of the present study differ from those of earlier studies (e.g., Eustace, McDonald, & Long, 1999) where it was found that patients with a diagnosis of PTSD reported higher levels of dissatisfaction with available support following a severe cyclone, as well as the study of New Zealand police offices (Stephens & Long, 1999) where it was shown that it was not the quantity but the quality of that support which best attenuated the negative impact of exposure to trauma.

Although the present study has shown that social support can buffer the impact of trauma, the process by which this happens is not a simple one. The provision of social support may reduce the psychological consequences of trauma by encouraging changes in behaviour. By the provision of useful information, or by having behaviour directly facilitated by supportive others at the time of, or shortly after, the traumatic event, may assist its severity. The provision of a wide social support system after a traumatic event could encourage or facilitate coping and recovery behaviours. Supportive others may also provide practical assistance. The objective impact of social support may be mediated by the perception of such support and the impact it has on affective or cognitive processes. The effect of social support on cognitive processes lends support to the information processing models of the development of

PTSD (e.g., Howowitz, 1986; Foa, Steketee, & Rothbaum, 1989; Resick & Schnicke, 1992). The information-processing theories propose that when patients receive strong, positive support, where they can process, categorize, and accommodate information into a view of the world that restores their feelings of security and invulnerability, they are less likely to develop PTSD. Similarly, the findings support the more recent cognitive processing model by Creamer (1995) who proposed that effective recovery is facilitated by voluntary activation of the memory network such as talking about the trauma with others.

The findings of this study suggest that the perception of having others to provide support could lead to a more positive affect and a better psychological state. The ability to control events is critical to mental health, and a sense of personal control following a traumatic event may be directly related to more successful coping. Thus persons who have been provided with high levels of support in their time of need may experience positive affect from affiliation and self-efficacy from their confidence in the availability of future support. It is possible that the provision of social support may also act as a physiological mediator in the prevention of developing PTSD. The physiological mechanism, the release of hormones that help relax the fight and flight response, is provided by social support and affects psychological health. Again, this possibility supports the neurobiological theories of PTSD where it is argued that increased sensitivity and sensitisation of the nor-adrenergic system may leave the individual in a hyper-aroused, vigilant, sleep-deprived and, at times, explosive state that worsens over time (Davis, 1992; LeDoux, 2000; Southwick, Bremner, Krystal & Carney, 1994; Jones & Barlow, 1992; Yehuda, 1998).

The findings of the current study have implications for practice as they show the importance of social support (both quantity and quality) following a traumatic event to assist recovery. Initially, what is required is the provision of concrete help (food, warmth, shelter, safety). If this support is not available from family and friends, there are numerous organizations such as the Victims of Crime Assistance Tribunal, Red Cross, Uniting Church Outreach, or the Salvation Army who are able to assist. Secondly, the person who has experienced a traumatic event requires the opportunity to talk with supportive others about the trauma and its related emotions so that the experience can be assimilated. The role of the psychologist is important to reduce states of extreme emotion and increase controllability, to assist in the often painful and repetitious re-appraisal of the trauma, and to treat specific symptoms such as ASD, depression, and anxiety. In addition, a network of social support is shown to be significant in helping prevent patients with an initial diagnosis of ASD from going on to have PTSD. However, many people, for a variety of reasons, do not have a number of people they can call on to support them. If this help is not available from family and friends, the person who has experienced a traumatic event needs to be referred to appropriate agencies that will provide them with social support.

Personality Factors (Sociotropy and Autonomy) in the Development of PTSD

The present study examined the role of personality factors, namely sociotropy and autonomy, in the development of PTSD, to add to the sparse information that is currently available. By way of contrast, there exists a large body of research findings that identifies these personality dimensions as vulnerability factors in the development of depression (e.g. Arieti & Bemporad, 1980; Beck, 1983; Blatt, Quinlan, Chevron, McDonald, & Zuroff, 1982; Blatt & Zuroff, 1992; Bowlby, 1980;

Coyne & Whiffen, 1995; Nietzel & Harris, 1990; Pilkonis, 1988). However, there is only one published research paper that explores the relationship between sociotropy and autonomy and the development of PTSD (Kolts, Robinson, & Tracy, 2004).

The hypothesis that individuals high in either of the personality traits, sociotropy and autonomy, would experience higher levels of PTSD following a traumatic event (Hypothesis 3) was supported in the present study. The two groups were compared on their scores on the PSI-11, and it was found that both groups showed high levels of sociotropy and autonomy, but the PTSD group scored higher than the non-PTSD group. When compared on the six subscales of sociotropy and autonomy, it was shown that the PTSD group scored higher on all of the subscales of autonomy (perfection, need for control, defensive separation) and on the sociotropy subscales of concern for others, and pleasing others than the non-PTSD group. The group difference on the dependency subscale of sociotropy was non-significant. However, a caution in interpreting these results is that the measures of autonomy and sociotropy are concurrent with the diagnosis of PTSD. Therefore, it could be argued that the traumatic event and PTSD caused the participants to score high on the measures, rather than their high scores making them more vulnerable to PTSD. In particular, issues of lack of trust may have made their scores higher, as people who have been traumatized tend not to trust, nor let others into their private psychological pain.

These results extend Beck's (1983) contention that sociotropy and autonomy represent factors for dysphoria in the face of life stressors, which has been supported particularly for sociotropy (e.g., Clark, Beck & Brown, 1992; Nietzel & Harris, 1990, Sato & McCann, 1997), and indicates they may also play a significant role in the development of other posttraumatic symptoms as well. According to Beck (1983),

sociotropy and autonomy represent personality styles characterized by pervasive, rigid beliefs about oneself and the world. Highly sociotropic persons, excessively invested in positive exchanges with others, with a heightened need for acceptance, understanding, support, and guidance are shown to become preoccupied with themes of loss and abandonment when their relationships fail. Therefore, highly sociotropic persons were most likely to become depressed in response to interpersonal loss or rejection.

A review of the traumatic events experienced by participants in the PTSD group in the present study showed a higher proportion involving interpersonal loss (witnessing the murder of a friend, accidents where they thought they were going to be killed, involved in accidents where others were killed, and assault) than for those in the ASD group. There were fewer such incidents in the non-PTSD group, where no-one thought they would lose their life at the time of the traumatic event. Especially relevant is the difference between the PTSD and non-PTSD group where four of the former had been traumatized by interpersonal relationships within their workplace, compared to only one person in the latter group. Those psychologists working in clinical settings are familiar with people who have developed PTSD as a result of a threat to their physical integrity in their workplace. These patients have lost prestige, status, and support when, for example, they are victimized and abused, not promoted, made redundant, or humiliated during restructuring of the workplace.

Based on the theory of Beck (1983) it was expected that those in the PTSD group would score high on the personality dimension autonomy. Persons high on autonomy, with standards that are higher than the norm, have a strong investment in preserving and increasing their independence, mobility, and personal rights; freedom of choice,

action and expression; protection of their domain; and attaining meaningful goals. These achievement-oriented individuals are concerned about the possibility of personal failure, and try to maximize their control over the environment thus reducing the probability of failure. If these individuals fail to achieve their goals, or if they experience events that represent a perceived loss in a domain that has particular meaning or relevance to them, they become depressed and can be identified by their tendency to ruminate on feelings of inadequacy and personal failure in response to their feelings of failure or lack of control over the environment.

In the present study, members of the PTSD group were initially diagnosed as having ASD, a DSM-IV disorder where Criterion A requires that the persons are to have experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others, and the person's responses involved intense fear, helplessness, and/or horror. Earlier research (e.g., Blatt, Conrell, & Eshkol, 1993) showed that highly autonomous, achievement orientated persons are more likely to become depressed when faced with life events that carry the implication that they have failed to achieve their goals or when there is a loss of control over their environment. Therefore it was expected, and confirmed, in this study that persons who had experienced a range of traumas where they suffered considerable loss, had little or no control over their environment, and who scored high on the personality trait autonomy would be more likely develop more serious symptomatology and go on to have PTSD than those with lower scores.

A major difficult in carrying out this study was the lack of information regarding sociotropy and autonomy, and the development of PTSD as research was mainly

focused on these two personality dimensions in the development of depression. The findings differed from the results of an early study of depression by Robins (1988) who tested Beck's (1983) hypothesis that depressive symptoms occurred when autonomous persons failed to exercise control over their environment or to achieve their goals. Robins found autonomy was not significantly related to depression level, and there was no evidence to support that autonomy was a vulnerability factor for specific negative events. However, Robins conceded that there were serious methodological limitations in the research, including that the results could not be generalized (all participants were students) and a less than optimal scale was used for measurement. In contrast to Robins, the findings of the current research showed autonomy was a vulnerability factor for specific negative events. Further, the current research results can be generalized, and reliable and valid scales were used for measurement.

The current findings, however, do lend support to other earlier studies of depression (e.g., Hammen, Ellicott, Gitlin, & Jamison, 1989; Hammen, Ellicott, & Gitlin, 1989). Hammen and colleagues followed sociotropic and autonomous depressed patients for six months after remission and found that onset or exacerbation of depressive symptoms was associated with subjects' experience of more threat from events that were congruent with their predominant personality dimension (sociotropy or autonomy) than from events that were incongruent with it. In addition, the findings lend support to studies that examined the relationship between high scores on sociotropy and autonomy, and trait anxiety (e.g., Sato, McCann, & Ferguson-Isaac, 2004) where scores on sociotropy were positively correlated with rated trait anxiety in situations of 'social evaluation, 'physical danger', and 'ambiguous situations',

whereas scores on autonomy were positively correlated with rated trait anxiety in 'daily routines'.

Finally, a comparison was made between the findings of the only published article that examines the relationship between sociotropic and autonomous personality styles, and PTSD. The recent American study by Kolts, Robinson, and Tracy (2004) furthered earlier research (e.g., Foa & Rothbaum, 1998; Foa, Tolin, Ehlers, Clark, & Orsillo, 1999; Janoff-Bulman, 1992; Owens & Chard, 2001; Resick & Schnicke, 1992) that suggested individuals with extreme beliefs about themselves and their world would be more vulnerable to the development of PTSD. The work of Kolts et al. examined if sociotropy and autonomy might predispose individuals towards exaggerated cognitions following a traumatic event, thus making them vulnerable to the development of PTSD. Their results showed PTSD symptoms were significantly related to personality styles that overemphasized either the role of personal relationships or autonomous achievements in determining personal satisfaction. Similar results to those of Kolts et al. were found in the current study thus confirming that sociotropic and autonomic persons are vulnerable to the symptoms of PTSD. In addition, the findings clarify the proposition of Foa and Rothbaum (1998) that individuals with extreme beliefs about themselves and the world, in either positive or negative directions are more vulnerable to the development of PTSD.

Acute Stress Disorder Symptoms as Predictors of PTSD

This thesis also investigated the ability of both a diagnosis of ASD and its component symptoms to predict PTSD. Based on a considerable body of previous research (e.g., Brewin, Andrews, Rose, & Kirk, 1999; Bryant & Harvey, 1996;

Harvey & Bryant, 1998; Bryant, Moulds & Guthrie, 2000) it was hypothesized that those patients who went on to have a diagnosis of PTSD would have higher levels of all types of acute stress disorder symptoms (Hypothesis 4). This hypothesis was supported in part as when the two groups were compared on their patterns of symptoms of ASD at the time of referral, it was shown that those patients making up the PTSD group had significantly higher levels on all groups (disassociation, re-experiencing, avoidance, and arousal) of ASD symptoms. However, when canonical co-efficients were interpreted following the interpretive rules recommended by Tabachnick and Fiddell (1996), ASD dissociation and ASD re-experiencing were identified as significant contributors to the disciminant function. The ASD avoidance and ASD arousal symptoms were identified as non-significant contributors to the discriminant function.

The findings of this study support the research of Brewin, Rose, and Kirk (1999) who found an overall diagnosis of ASD correctly classified 83% of the group with a diagnosis of PTSD. Similarly, the findings confirm previous research (e.g., Elklit & Brink, 2004) where the dissociative, re-experiencing, avoidant, and arousal criteria correctly classified 79% of the subsequent PTSD cases in a study of physical assault victims. However, the findings of the current study only partly support those of Kangas, Henry and Bryant (2005) who found the ASD symptoms of emotional numbing (avoidance), a sense of reliving the traumatic experience (re-experiencing), and motor restlessness (arousal) were the best predictors of subsequent PTSD in their group of cancer patients. The current findings differ from those of Mellman, David, Bustamante, Fins and Esposito (2002) who found the ASD symptoms of heightened arousal were the independent predictors of PTSD at follow-up of in a group of

patients admitted to a trauma centre following life threatening events. Similarly, the current findings only partly supports those of Creamer, O'Donnell and Pattison (2004). In their recent investigation of the relationship between ASD and the subsequent development of PTSD in a population of severely injured and hospitalised trauma survivors, Creamer et al. found that logistic regression indicated that only arousal and re-experiencing the traumatic event predicted a categorical PTSD diagnosis.

The ASD symptoms of avoidance were shown to be non-significant predictors of PTSD in the current study. Thus, the previous findings differ from those of Harvey, Bryant and Lang (1998) where the persistent avoidance diagnostic criteria variable for PTSD (Criteria 3) the 'inability to recall an important aspect of the trauma' was examined in an investigation of survivors of motor vehicle accidents. After the influence of depression was controlled, Harvey et al. found participants with ASD reported fewer specific memories to positive cue words than did non-ASD participants. When the same participants were assessed for PTSD at six months post trauma, it was found that poor recall of specific memories of the trauma accounted for 25% of the variance of the PTSD severity.

While the current study found that those patients who went on to experience PTSD were distinguished from those who did not develop PTSD by having greater amounts of dissociation and re-experiencing in the acute stress stage, Creamer O'Donnell and Pattison (2004) found the dissociative symptoms of ASD were rarely endorsed in their study of severely injured and hospitalised trauma survivors. Similarly, the current research findings differ from those of Mellman, David, Bustamante, Fins and Esposito

(2002) where dissociative reactions and a diagnosis of ASD were not significant in predicting PTSD in their group of patients admitted to a trauma centre following life- threatening events. In addition, the current findings differ from Kangas, Henry and Bryant (2005) who found that acute dissociation did not necessarily predict subsequent PTSD in their group of cancer patients. In contrast, the current findings support those of Birmes et al. (2003) where the ASD symptoms of dissociation were shown to be robust predictors of PTSD. In the study of Birmes et al., the ASD symptoms of dissociation accounted for 33% of the variance in PTSD.

Conflicting results have been found in previous research, therefore the present study attempted to clarify which group of ASD symptoms were predictive of PTSD. Based on results, it is therefore postulated that patients with a diagnosis of ASD, with greater amounts of ASD dissociation symptoms (during or after the trauma, feeling numb or distant from their emotions; things around them feeling unreal or dreamlike; feeling very distant from their normal self or like they were watching it from outside; being unable to recall important aspects of the trauma) and the ASD re-experiencing symptoms (memories of the trauma keeping on entering their mind; having bad dreams or nightmares about the trauma; feeling as if the trauma was about to happen again; feeling upset when they are reminded of the trauma) are at a high risk of remaining symptomatic and may go on to have a diagnosis of PTSD. Again, based on interpretation of canonical co-efficients in the present study, those patients with higher levels of sociotropy, greater amounts of ASD dissociation and re-experiencing symptoms in the acute stage, and with lower number of people who they can rely upon for social support are most likely to go on to have a diagnosis of PTSD.

Methodological Considerations

A major strength of the current study was the reliability of the data to provide the diagnosis of ASD and PTSD as it was gathered by two independent psychologists who used structured interviews. Further, participants were both men and women from a wide range of ages, marital status, education, and occupations leading to the capacity to draw generalizable conclusions. However, it could also be argued that a more homogenous group of participants involved in one specific traumatic event may provide more accurate findings. Research with special, high-risk populations such as military personnel, emergency service workers, and police officers, for example, could provide opportunities for studies of the relationship of the factors studied here.

The findings of the study should also be considered with certain limitations. Specifically, there were a small number of participants (n=51), especially in the ASD group (n=20). The small number of participants precluded exploring factors that might moderate or mediate the impact on PTS symptom formulation. Secondly, events differ with respect to potential lethality. Although patients in the PTSD group were not involved in statistically significantly different traumatic events, there were more severe events in that group. Five members of the PTSD group, for example, thought they were going to be killed at the time of the traumatic event. This can be compared with no patients in the ASD group thinking they were going to die.

A further limitation of the study was that no data was obtained as to whether or not the patients were recipients of compensation, nor the type or amount of treatment provided by the two psychologists in the intervening month of measurement. Future research could involve a larger number of participants, preferably those who have

been traumatized by the same or a similar event, and from a homogenous treatment group.

Implications for Treatment

Acute Stress Disorder and PTSD are psychological disorders that are evolving. The concepts are important to psychologists in most clinical areas because many people who present for treatment have experienced traumatic events. By the nature of their work, psychologists are in a position to help their patients from developing chronic symptoms. The concepts of ASD and PTSD are complex: biological and physiological changes occur, and the disorders are detrimental to the normal functioning of the individual. The psychological attributes of ASD and PTSD are most important because it is the alteration in an individual's thoughts, feelings, and behaviours that leads to the need to identify and treat the disorders.

The findings of the present study have implications for treatment. What can be concluded is the importance of social support (both quantity and quality) following a traumatic event to assist recovery. Psychologists therefore should guide their patients to seek out resources that provide them with valued sources of reinforcement such as social relationships. If there is not a source of available social supports available, it is therefore imperative that the patient be given considerable support by their medical practitioner, psychologist, counsellors, and other appropriate allied health professionals.

Secondly, to the extent that sociotropy and autonomy are major factors in the development of PTSD, the impact of treatment should be considered. As well as providing answers, this study has raised a few intriguing questions. Can psychologists treat the underlying personality variable rather than the specific manifest disorder?

As sociotropy and autonomy, for examply, are shown to be an important element in the development of PTDS, can we interrupt the PTSD process by helping the person to change their characteristic personality style? Assessment of these characteristics, however, may help the therapist to work with the patient in developing coping strategies. As suggested by Beck (1983), persons who vary in their sociotropic and autonomous needs may respond better to different therapeutic styles and emphases. Persons with high autonomous needs, for example, would benefit from techniques to manage their trauma by the therapist challenging their thoughts of self-blame and feelings of failure and worthlessness, and helping them build a sense of resilience in the short term. This can be compared to treatment of patients who are assessed as having high sociotropic needs who will most likely become dependent upon their therapist. In treating those patients with high sociotropic needs and with low social supports, it is important for the therapist to encourage a build up of social supports and to deal with any feelings of anxiety about relationships. During the therapeutic relationship, the therapist needs to build up the patient's autonomy by fostering their independence. For autonomous patients, therapy would therefore be concerned with establishing other means of ensuring self-esteem, whereas patients with high sociotropic needs would be more likely to respond to reassurance and being with their sources of nurturing following a traumatic event.

Finally, accurate assessment and early treatment should be offered to patients after a traumatic event as overall ASD is shown to be a strong predictor of PTSD. Early assessment and treatment of ASD arousal symptoms is especially important as ASD arousal was shown to be a significant predictor of all 3 types of PTSD symptoms. Early treatment for patients assessed with high ASD arousal and high sociotropic

needs were especially shown to be predictive of having a later diagnosis of PTSD. Treatment of ASD requires debriefing as an early intervention, followed therapies including cognitive behavioural therapy, desensitisation, relaxation training, eye movement desensitisation and reprocessing (EMDR), hypnotherapy, and supportive counselling. Although cognitive behavioural therapy may be helpful relatively acutely for traumatic exposure, heightened arousal and anxiety states may preclude some patients from absorbing information or acquiring new coping skills in the immediate aftermath of trauma.

Conclusion

The development of PTSD is complex with many theorists proposing learning, information processing, psychobiologic, and psychosocial theories. Previous research has also considered issues such as exposure to prior traumatic stressors, family history of psychopathology, and the exposed person's own psychological difficulties as predictors of PTSD symptoms. The purpose of the present study was to discover some of the differences between those patients who developed PTSD those who did not, and focused upon social support, personality factors, and ASD symptoms as predictors of PTSD. It investigated the relationships between traumatic events, ASD and PTSD and the variables social support (quantity and quality) and sociotropic and autonomous personality styles. The findings indicated that clear relationships exist and that assessment of the specific attributes early in the ASD assessment can predict vulnerability to PTSD. These findings contribute to the practitioner literature on the treatment of persons suffering trauma and through appropriate interventions help to reduce or alleviate the subsequent onset of PTSD.

References

Affleck, G., Tennen, H., Urrows, S., & Higgins, P. (1994). Person and contextual features of daily stress reactivity in individual differences in relations of undesirable daily events with mood disturbance and chronic pain intensity. *Journal of Personality and Social Psychology*, *66*, 329-3

Alford, B., & Gerrity, D. (2003). The specificity of sociotropy-autonomy personality dimensions to depression vs anxiety. *Journal of Clinical Psychology, 59,* 1069-1075.

Allodi, F. (1994). Post-traumatic stress disorder in hostages and victims of torture. *The Psychiatric Clinics of North America, 17*, 279-288.

Arieti, S., & Bemporad, J. (1980). The psychological organisation of depression.

American Psychiatric Association (1952). *Diagnostic and Statistical Manual of Mental Disorders.* Washington, DC: American Psychiatric Association.

American Psychiatric Association (1968). *Diagnostic and Statistical Manual of Mental Disorders.* Washington, DC: American Psychiatric Association.

American Psychiatric Association (1980). *Diagnostic and Statistical Manual of Mental Disorders.* Washington, DC: American Psychiatric Association.

American Psychiatric Association (1987). *Diagnostic and Statistical Manual of Mental Disorders.* Washington, DC: American Psychiatric Association.

American Psychiatric Association (1994*). Diagnostic and Statistical Manual of Mental Disorders*. Washington, DC: American Psychiatric Association.

Beck. A., Ward, C., Mendelsen, M., Mock, J. & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4*, 561-571.

Beck, A. (1983). Cognitive therapy of depression: New perspectives. In P. J. Clayton & J. E. Barrett (eds.), *Treatment of depression: Old controversies and new approaches* (pp. 265-290). New York: Raven Press.

Beck, A., Epstein, N., Harrison, R., & Emery, G. (1983). *Development of the Sociotropy-Autonomy Scale:A measure of personality factors in psychopathology*. Philadephia:Pennsylvania.

Beck, A. (1983*). Cognitive therapy of depression: New perspectives*. In P. J. Clayton & J. E. Barrett (Eds.). Treatment of depression: Old controversies and new approaches (pp. 265.290). New York: Raven Press.

Becker, J. (1982). The effects of sexual assault on rape and attempted rape victims. *Victimology, 7,* 106-113.

Biddle, D., Creamer, M., Forbes, D., Elliott, P, & Devilly, G. (2002). Self-reported problems: A comparison between PTSD-diagnosed veterans, their spouses, and clinicians. *Behaviour Research and Therapy, 40*, 853-865.

Birmes, P., Brunet, A., Carreras, D., Ducasse, J., Charlet, J., Lauque, D. Sztulman, H., & Schmitt, L. (2003). The predictive power of peri traumatic dissociation and acute stress symptoms for posttraumatic stress symptoms: A three-month prospective study. *American Journal of Psychiatry, 160*, 1337-1400.

Black, S., & Bruce, B. (1989). Behaviour therapy: A clinical update. *Hospital and Community Psychiatry, 40*, 1152-1158.

Blake, D., Weathers, F., Nagy, L., Kaloupek, L., Klauminzer, G., Charney, D., & Keane, T. (1990). A clinician rating scale for assessing current and lifetime PTSD: The CPAS-1. *The Behaviour Therapist, 13*, 187-188.

Blake, D., Weathers, F., Nagy, L., Kaloupek, D., Gusman, F., Charney, D. & Keane, T. (1995). The development of a clinician-administered PTSD scale. *Journal of Trauma and Stress, 1*, 75-90.

Blake, D., Weathers, F., Nagy, L., Kaloupek, D., Charney, D., & Keane, T. (1998). *Clinician-Administered PTSD Scale for DSM-IV,* National Centre for Posttraumatic Stress Disorder, Behavioral Science Division, Boston VA Medical Centre.

Blatt, S., D'Afflitti, J., & Quinlan, D. (1976). Experiences of depression in normal young adults. *Journal of Abnormal Psychology, 85*, 383-389.

Blatt, S., Quinlan, D., Chevron, E., McDonald, C., & Zuroff, D (1982). Dependency and self-criticism: Psychological dimensions of depression. *Journal of Consulting and Clinical Psychology, 50*, 113-124.

Blatt, S., & Zuroff, D. (1992). Interpersonal relatedness and self-definition: Two prototypes for depression. *Clinical Psychology Review, 12*, 527-562.

Blatt, S., Cornell, C., & Eshkol, E. (1993). Personality style, differential vulnerability, and clinical course in immunological and cardiovascular disease. *Clinical Psychology Review, 13,* 421-450.

Bluth, G. (1995). Parental drinking as a predictor of cognitive style, depression, and hopelessness. *The Sciences & Engineering, 55,* 3580.

Bouton, M., Mineka, S. & Barlow, D. (2001). A modern learning theory perspective I in the etiology of panic disorder. *Psychological Review, 108*, 4-32.

Bowlby, J. (1980) *Attachment and loss: Volume 111*, Australia: Penguin Books.

Bremmer, J., Southwick, S., & Johnson, D. (1993). Childhood physical abuse and combat-related post-traumatic stress disorder in Vietnam veterans. *American Journal of Psychiatry, 150*, 235-239.

Brende, J. & Parson, E. (1985). *Vietnam veterans: The road to recovery*, New York: Plenum Press.

Breslau, N., Davis, G., Andreski, P. & Peterson, E. (1991). Traumatic events and post-traumatic stress disorder in an urban population of young adults. *Archives of General Psychiatry, 48*, 216-222.

Brewin, C., Andrews, B., Rose, S. & Kirk, M. (1999). Acute stress disorder and posttraumatic stress disorder in victims of violent crime. *American Journal of Psychiatry, 156*, 360-366.

Bryant, R. (1999). The acute stress disorder scale: a tool for predicting post-traumatic stress disorder. *Australian Journal of Emergency Management*, 13-15.

Bryant, R. (2000). Acute stress disorder. *PTSD Research Quarterly, 1*, 108.

Bryant, R. & Harvey. A. (1996). Relationship of acute stress disorder and post traumatic stress disorder following mild traumatic brain injury. *American Journal of Psychiatry, 155,* 625-629.

Bryant, R. & Harvey, A. (1997). Acute stress disorder: A critical review of diagnostic issues. *Clinical Psychology Review*, *17,* 757-773.

Bryant, R. & Harvey, A. (1998). Relationship of acute stress disorder and posttraumatic stress disorder following mild traumatic brain injury. *American Journal of Psychiatry, 155*, 625-529.

Bryant, R. & Harvey, A. (2000). *Acute stress disorder. A handbook of theory, assessment and treatment*. Washington DC: American Psychological Association

Bryant, R., Harvey, A., Dang, S., & Sackville, T. (1998). Assessing acute stress disorder: Psychometric properties of a structured clinical interview. *Psychological Assessment, 10*, 215-220.

Bryant, R., Harvey, A., Sackville, T., Dang, S., & Basten, C. (1998). Treatment of acute stress disorder: A comparison of cognitive behavioural therapy and supportive counselling. *Journal of Consulting and Clinical Psychology, 66*, 862-866.

Bryant, R., Moulds, M. & Guthrie, R. (2000). Acute stress disorder scale: A self-report measure of acute stress disorder. *Psychological Assessment, 12*. 61-74.

Burgess, A., & Holmstrom, L. (1974). Rape trauma syndrome. American *Journal of Psychiatry, 131*, 981-986.

Caballo, V. (1998). *International Handbook of Cognitive and Behavioral Treatments for Psychological Disorders*. Spain:Pergamon.

Campbell, D., Kwon, P., Reff, R., & Williams, M. (2003). Sociotropy and autonomy: An examination of interpersonal and work adjustment. *Journal of Personality Assessment, 80*, 206-207.

Cardena, E., Classen, C. & Spiegel, D. (1991). *Stanford acute stress reaction questionnaire*. Stanford, CA: Stanford University Medical School.

Catanzaro, S., Wasch, H., Mearns, J. & Kirsch, I. (2000). Coping-related expectancies and dispositions of prospective predictors or coping responses. *Journal of Personality, 68*, 757-788.

Catherall, D. (1989) Differentiating intervention strategies for primary and secondary trauma in post-traumatic stress disorder: The example of Vietnam veterans. *Journal of trauma and stress, 2,* 289-304.

Chemtob, C., Roitblat, H., Hamada, R., Carlson, J., & Twentyman, C. (1988). A cognitive action theory of post-traumatic stress disorder. *Journal of Anxiety Disorders, 2,* 253-275.

Clark, D. (2004). Developing new treatments: on the interplay between theories, experimental science and clinical innovation. *Behaviour Research & Therapy*, *42,* 1089-1104.

Clark, D., Beck, A., & Brown, G. (1992). Sociotropy, autonomy, and life event perceptions in dysphoric and nondysphoric individuals. *Cognitive Therapy and Research, 16*, 635-652.

Classen, C., Koopman, C., Hales, M. & Spiegel, D. (1998). Acute stress disorder as a predictor or posttraumatic stress symptoms. *American Journal of Psychiatry, 5,* 620-624.

Cohen, S. & Wills, T. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98,* 310-357.

Cook, J. & Bickman, L. (1990). Social support and psychological symptomatology following a natural disaster. *Journal of Traumatic Stress, 3,* 541-556.

Coyne, J. (1995). Issues in personality as diathesis for depression: The case of sociotropy-dependency and autonomy-self-criticism. *Psychological Bulletin, 118,* 358-378.

Coyne, J. & DeLongis, A. (1986). Going beyond social support: the role of social relationships in adaption. *Journal of Consulting Clinical Psychology, 54*, 454-460.

Coyne, J. & Whiffen (1995). Issues in personality as diathesis for depression: The case of sociotropy-dependency and autonomy-self-criticism. *Psychological Bulletin, 118*, 358-378.

Creamer, M. (1995). A cognitive processing formulation of post-traumatic reactions. In R. Kleber, C. Figley, & B. Gersons (Eds). *Beyond trauma: Cultural and societal dynamics.* Pp55-74. London: Plenum Press.

Creamer, M., Burgess, P., Pattison, P. (1992). Reaction to trauma: A cognitive processing model. *Journal of Abnormal Psychology*, *101*, 453-459.

Creamer, M., Forbes, D., & Devilly, G. (1999). Posttraumatic stress disorder (PTSD) and war-related stress: Information for veterans and their families. *Articles of Veterans' Affairs and The National Centre for War-Related PTSD Monograph.*

Creamer, M., & O'Donnell, M. (2002). Posttraumatic stress disorder. *Current Opinion in Psychiatry, 15*, 163-168.

Creamer, M., O'Donnell, M. & Pattison, P. (2002). Predicting PTSD: is ASD the answer? *Annual Conference of the British Association for Behavioural and Cognitive Psychotherapy,* Warwick, UK.

Creamer, M., & Forbes, D. (2004). Treatment of posttraumatic stress disorder in veteran and military populations. *Psychotherapy: Theory, Research, Practice, Training, 41*, 388-398.

Creamer, M., O'Donnell, M., & Pattison, P. (2004). The relationship between acute stress disorder and posttraumatic stress disorder in severely injured trauma survivors. *Behaviour Research & Therapy*, *42*, 315- 328.

Daley, S., Hammen, C., Burge, D., Davila, J., Paley, B., Lindberg, N., & Herzberg, D. (1997). Predictors of the generation of episodic stress: A longitudinal study of late adolescent women. Journ*al of Abnormal Psychology*, *106*, 251-259.

Davis, M. (1992). The role of the amygdala in fear and anxiety. *Annual Review of Neuroscience, 15*, 353-375.

Davis, G. & Breslau, N. (1994). Post-traumatic stress disorder in victims of civilian trauma and criminal violence. *Psychiatric Clinics of North America, 17*, 289-299.

Dearn, K., & Matthews, L. (1998). Child sexual assault and PTSD: What the rehabilitation counsellor should know. *The Australian Journal of Rehabilitation Counselling, 1*, 118-129.

DeLongis, A., Folkman, S., & Lazarus, R. (1988). The impact of daily stress on health and mood: Psychological and social resources as mediators. *Journal of Personality and Social Psychology, 54*, 486-495.

Devilly, G (1996). EMDR and PTSD: The score at half time. *Psychotherapy in Australia, 3*, 26-31.

Devilly, G. (2000a). The treatment of PTSD-where the research directs us as clinicians. *Victims Referral and Assistance Service and Crime Prevention Victoria Annual Conference.* Melbourne.

Devilly, G. (2000b). A multimodal approach to the treatment of PTSD in Victorian veterans. *Victims Referral and Assistance Service and Crime Prevention Victoria Annual Conference.* Melbourne.

Devilly, G. (2001a). The successful treatment of PTSD through overt behavioural therapy in non-responders to EMDR. *Behavioral and Cognitive Psychotherapy*, *29*, 57-70.

Devilly, G. (2001b). Current issues in PTSD. *Swinburne University Psychology Honours Lecture*. Melbourne.

Devilly, G. (2002). Planning and providing an early psychological response following a traumatic event. *ASD, PTSD & Recovery*. Sydney.

Devilly, G., & Spence, S. (1999). The relative efficacy and treatment of EMDR and a cognitive behavioural trauma treatment protocol in the amelioration of posttraumatic stress disorder. *Journal of Anxiety Disorders*, *13*, 131-157.

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

Ellard, J. (1997). The epidemic of post-traumatic stress disorder: a passing phase? *Medical Journal of Australia*, *166*, 84-87.

Eustace, K., MacDonald, C., & Long, N. (1999). Cyclone Bola: A study of the psychological after-effects. *Anxiety, Stress and Coping, 12*, 285.

Everett, K., Sletten, C., Carmack, C., Brantley, J. Jones, G., & McKnight, T. (1993). Predicting non-compliance to fluid restrictions in hemodialysis patients. *Dialysis and Transplantation, 22*, 614-620.

Figley, C., & Leventman, S. (1980) *Strangers at home: Vietnam veterans since the war.* New York: Praeger.

Foa, E., Steketee, G., & Rothbaum, B. (1989). Behavioural/cognitive conceptualisations of post-traumatic stress disorder. *Behaviour Therapy*, *20*, 155-176.

Foa, E., Zinbarg, R. & Rothbaum, B. (1992). Uncontrollability and unpredictability in posttraumatic stress disorder: An animal model. *Psychological Bulletin*, *112*, 218-239.

Foa, E., & Rothbaum, B. (1998). Treating the trauma of rape. *Cognitive-behavioral therapy for PTSD*. New York: Guilford Press.

Foa, E., Tolin, D., Ehlers, A., Clark, D., & Orsillo, S. (1999). The posttraumatic cognitions inventory (PTCI): Development and validation. *Psychological Assessment, 11*, 303-314.

Foa, E. & Tolin, D. (2000). Comparison of the PTSD symptom scale-interview version and the clinician-administered PTSD scale. *Journal of Trauma and Stress, 13,* 181-191.

Forbes, D. & Bennett, N. (2004). Clinical presentations and treatment outcomes for Australian peacekeepers with PTSD. *14th Asia Pacific Military Medicine Conference*, Brisbane.

Forbes, D., Hawthorne, G., Elliott, P., McHugh, T., Biddle, D., Creamer, M. & Novaco, R (2004). A concise measure of anger in combat-related posttraumatic stress disorder. *Journal of Traumatic Stress, 17*, 249-256.

Friedman, M., & Whisman, M. (1998). Sociotropy, autonomy, and bulimic symptomatology. *International Journal of Eating Disorders, 23,* 439-442.

Ganster, D, & Victor, B. (1988). The impact of social support on mental and physical health. *British Journal of Medical Psychology, 61*, 17-36.

Gilbert, P., & Reynolds, S. (1990). The relationship between the Eysenck Personality Questionnaire and Beck's Concepts of Sociotropy and Autonomy. *British Journal of Clinical Psychology*, *29*, 319-327.

Green B. & Berlin, M. (1987). Five psychosocial variables related to the existence of posttraumatic stress disorder symptoms. *Journal of Clinical Psychology*, *43*, 643-649.

Green, B., Wilson, J. & Lindy, J. (1985). Conceptualising post-traumatic stress disorder: A psychosocial framework. In C. Figley. *Trauma and its wake*. 53-72. New York: Brunner/Mazel.

Grummon, K (1995). Biopsychosocial factors in homosexual men with AIDS: A study of psychological distress, body image, physical symptoms and social support. *The Sciences & Engineering*, 56, 1107.

Haley, S. (1974). When the patient reports atrocities: Specific treatment considerations of the Vietnam veteran. *Archives of General Psychiatry, 30*, 191-196.

Haley, S. (1984). When the patient reports atrocities: Specific treatment considerations of the Vietnam veteran. *Archives of General Psychiatry*, *30*, 191-196.

Hammen, C., Ellicott, A. & Gitlin, M. (1989). Vulnerability to specific life events and prediction of course of disorder in unipolar depressed patients. *Canadian Journal of Behavioural Science, 21*, 377-388.

Hammen, C., Ellicott, A., Gitlin, M., and Jamison, K. (1989). Sociotropy/autonomy and vulnerability to specific life events in patients with unipolar depression and bipolar disorders. *Journal of Abnormal Psychology*, *98*, 154-160.

Harbert, K. (2002). Acute traumatic stress, *Clinician Reviews, 12*, 50-57.

Harvey, A. & Bryant, R. (1998). Relationship of acute stress disorder and posttraumatic stress disorder following motor vehicle accidents. *Journal of Consulting and Clinical Psychology*, *66*, 507-512.

Harvey, A., Bryant, R., & Dang, S. (1998). Autobiographical memory in acute stress disorder. *Journal of Consulting & Clinical Psychology*, *66*, 500-506.

Hawthorne, G. (2003). Veterans with posttraumatic stress: how had is their quality of life? Health Outcomes 2003: The quest for Practice Improvement, Canberra. *Australian Health Outcomes Collaboration*.

Heard, B. (2005). *Well done, those men: Memoirs of a Vietnam veteran*. Australia: Scribe Publications Pty Ltd.

Helzer, J., Robins, L. & McEvoy, L. (1987). Post-traumatic stress disorder in the general population. *New England Journal of Medicine*, *317*, 1630-1634.

Herrmann, N., & Eryavec, G. (1994). Delayed onset post-traumatic stress disorder in World War 11 veterans. *Canadian Journal of Psychiatry, 39*, 439-441.

Hickling E., & Blanchard, E. (1992). Post-traumatic stress disorder and motor vehicle accidents. *Journal of Anxiety Disorders, 6*, 285-291.

Hilton, C., & Moniz-Cook, E. (2004). Examining the personality dimensions of sociotropy and autonomy in older people with dementia: Their relevance to person centred care. *Behavioral & Cognitive Psychotherapy, 32*, 457-465.

Hodgins, G., Creamer, M. & Bell, R. (2001). Risk factors for post trauma reactions in police officers: a longitudinal study. *Journal of Nervous and Mental Disease, 189*, 541-547.

Holmes, M. & St. Lawrence, J. (1983). Treatment of rape-induced trauma. Proposed behavioural conceptualisation and review of the literature. *Clinical Psychology Review*, *3*, 417-433.

Horowitz, M. (1986). *Stress response syndromes*. New York: Aronson.

Horowitz, M.(1991). *Person schemas and maladaptive interpersonal patterns*, Chicago:University of Chicago Press.

Horowitz, M., & Solomon, G. (1975). A prediction of delayed stress response syndromes in Vietnam veterans. *Journal of Social Issues*, *31*, 67-80.

Hyer, L., Woods, M., & Boudewyns, A. (1991). A three-tier evaluation of PTSD among Vietnam combat veterans. *Journal of Trauma Stress, 4*, 165-194.

Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma.* New York: Free Press.

Johnson, D., Feldman, S., Southwick, S., & Charney, D. (1994). The concept of the second generation program in the treatment of post-traumatic stress disorder among Vietnam veterans. *Journal of Traumatic Stress*, *7*, 217-235.

Jones, J., & Barlow, D. (1992). A new model of post-traumatic stress disorder: Implications for the future. Cited in D. Barlow (Ed*). Clinical handbook of psychological disorders*, p53, London: The Guilford Press.

Joseph, S., Williams, R. & Yule, W. (1997). Understanding post-traumatic stress: A psychosocial perspective on PTSD and treatment. West Sussex:John Wiley & Sons.

Kangas, M., Henry, J. & Bryant, R. (2005). The relationship between acute stress disorder and post-traumatic stress disorder following cancer. *Journal of Consulting and Clinical Psychology*, *73*, 360-364.

Kardiner, A. (1941). *The traumatic neurosis of war*. New York:Hoeber.

Keane, T., Zimering, R., & Caddell, J. (1985). A behavioural formulation of post-traumatic stress disorder in Vietnam veterans. *Behavioral Therapist, 8*, 9-12.

Kennedy, P. (2000). Anxiety and depression after spinal cord injury: a longitudinal analysis. *Archives of Physical Medicine and Rehabilitation*, *81*, 932-936.

Kessler, R., Sonnega, A., Bromet, E., Hughes, M. & Nelson, C. (1996). Post-traumatic stress disorder in the National Co-morbidity Study. *Archives of General Psychiatry, 52*, 1048-1060.

Kilpatrick, D., Veronen, L., & Resick, P (1982). Psychological sequelae to rape: In D. M. Doleys, R.L. Meredith & A.R. Ciminero (Eds.), *Behavioral medicine: assessment and treatment strategies.* New York: Plenum Press.

Kim, O. (1999) Predictors of loneliness in elderly Korean immigrant women living in the United States of America. *Journal of Advanced Nursing*, *29*, 1082-1088.

Klocek, J., Oliver, J. & Ross, M. (1997). The role of dysfunctional attitudes, negative life events, and social support in the prediction of depression dysphoria: A prospective longitudinal study. *Social Behaviour & Personality, 25,* 123-137.

Kolts, R., Robinson, A., & Tracy, J. (2004). The relationship of sociotropy and autonomy to posttraumatic cognitions and PTSD symptomatology in trauma survivors. *Journal of Clinical Psychology, 60*, 53-63.

Kulka, R., Schlenger, W., Fairbank, J., Hough, R., Jordan, B., Marmar, C., & Weiss, D. (1990). *Trauma and the Vietnam War generation*. New York: Brunner/Mazel.

LeDoux, J. (2000). Emotion circuits in the brain. *Annual Review of Neuroscience*, *23*, 155-184.

Lynch, T., Robins, C., & Morse, J. (2003). Couple functioning in depression: The roles of sociotropy and autonomy. *Journal of Clinical Psychology, 59,* 1349-1359.

Lyons, J. (1991). Strategies for assessing potential for positive adjustment following trauma. *Journal of Traumatic Stress*, *4*, 93-111.

McLean, L., Harvey, D., Pallant, J., Bartlett, J., Mutimer, K. (2004). Adjustment of mothers of children with obstetrical brachial plexus injuries: Testing a risk and resistance model. *Rehabilitation Psychology, 49, 254-260.*

Mackenzie, A, & Chang, A. (2002). Predictors of quality of life following stroke. *Disability and Rehabilitation*, 24, 259-265.

Matthews, L. (1998). Effect of staff debriefing on posttraumatic stress symptoms after assaults by community housing residents. *Psychiatric Services*, *49,* 207-212.

Matthews, L. (1999). Road trauma, PTSD and occupational functioning: Implications for policy development, intervention and rehabilitation. *The Australian and New Zealand Journal of Public Health, 23*, 323-325.

Matthews, L. (2000). The effects of PTSD on occupational functioning. *Journal of Applied Health Behaviour*, *2*, 27.

Matthews, L. (2004). Persisting PTSD: Implications for work functioning. Advanced EAP Practice – Partnering for Wellbeing and Performance. *13th National Employee Assistance Professional Association of Australia Conference.* October. Gold Coast.

Matthews, L. (2005). The effects of PTSD on Work performance, occupational functioning and return to work. *Trauma, psychological impact and PTSD – PPL Education Services. March.* Melbourne.

Matthews, L. (2005). Work potential of road accident survivors with posttraumatic stress disorder. *Behaviour Research and Therapy, 43*, 475-483.

Meichenbaum, D (1974). *Cognitive behavior modification*. Morristown, NJ: General Learning Press.

Mellman, T., David, D., Bustamante, V, Fins, A., & Esposito, K. (2001). Predictors of post-traumatic stress disorder following severe injury. *Depression & Anxiety, 14*, 226-231.

Miller, L. (1994). Civilian post-traumatic stress disorder: Clinical syndromes and psychotherapeutic strategies. *Psychotherapy*, *31*, 655-664.

Morse, J., Robins, C., Gittes-Fox, M. (2002). Sociotropy, autonomy, and personality disorder criteria in psychiatric patients. *Journal of Personality Disorder*, *16*, 549-560.

Mueser K., Salyers, M., Rosenberg, S., Ford, J., Fox, L., & Carty, P. (2991). Psychometric evaluation of trauma and posttraumatic stress disorder assessments in persons with severe mental illness. *Psychological Assessment, 12*, 110-117.

Nank, G (2004). A study investigating the impact of Adler's construct of social interest on burnout moderated by social support among Episcopal clergy. *The Sciences and Engineering, 64*, 4054.

Narduzzi, K. & Jackson, T. (2002). Sociotropy-dependency and autonomy pas predictors of eating disturbance among Canadian female college students. *Journal of Genetic Psychology, 163*, 389-402.

Neria, Y., Solomon, Z., & Dekel, R. (1998). Eighteen years follow-up of Israeli prisoner of war and combat veterans. *Journal of Nervous and Mental Disease. 186*, 174-182.

Nietzel, M., & Harrris, M. (1990). Relationship of dependency and achievement/autonomy to depression. *Clinical Psychology Review*, *10*, 279-297.

O'Donnell, M., Creamer, M., & Pattison, P. (2004). Posttraumatic stress disorder and depression following trauma: understanding co morbidity. *American Journal of Psychiatry*, *161*, 1390-1396.

O'Donnell, M., Creamer, M., Bryant, R., Schnyder, U., & Shalev, A. (2003). Posttraumatic disorders following injury: an empirical and methodological review. *Clinical Psychology Review*, *23*, 587-603.

Ogden, J. & Mtandabari, T. (1995). Examination stress and changes in mood and health related behaviours. *Psychology and Health*, *12*, 289-299.

O'Toole, B., Marshall, R., Schureck, R., & Dobson, M. (1998). Posttraumatic stress disorder and co-morbidity in Australian Vietnam veterans: risk factors, chronicity and combat. *Australian and New Zealand Journal of Psychiatry, 32*, 32-33.

Owens, G., & Chard, K. (2001). Cognitive distortions among women reporting childhood sexual abuse. *Journal of Interpersonal Violence, 16*, 178-191.

Ozer, E., Best, S., Lipsey, T., & Weiss, D. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: A meta analysis. *Psychological Bulletin*, *129*, 52-73.

Petrack, J., Doyle, A., Smith, A., Skinner, C. & Hedge, B. (2001). Factors associated with self-disclosure of HIV serostatus to significant others. *British Journal of Health Psychology, 6*, 69-80.

Pilkonis, P. (1988). Personality pro-types among depressives: Themes of dependency and autonomy. *Journal of Personality Disorders*, *2*, 144-152.

Ratna, L. & Barenel, D. (1997). The pharmacotherapy of post-traumatic stress disorder: A literature review and case report of treatment with nefazodone. *International Journal of Psychiatry in Clinical Practice*, *1*, 169-177.

Regehr, C. (2001). Individual predictors of posttraumatic distress: A structural equation model. *Canadian Journal of Psychiatry*, *46*, 156-161.

Regehr, C., Goldberg, G., Glancy, G., & Knott, T. (2002). Post-traumatic symptoms and disability in paramedics. *Canadian Journal of Psychiatry*, *47*, 953-959.

Resick, P., & Jordan, C. (1988). *Group stress inoculation training for victims of sexual assault: A therapist manual.* In P.A. Keller & S.R. Heyman (Eds.), Innovations in clinical practice: A source book, Vol. 7. Sarasota, FL: Professional Resource Exchange.

Resick, R., & Schnicke, M. (1992). Cognitive processing therapy for sexual assault victims. *Journal of Consulting and Clinical Psychology*, *60*, 748-760.

Reynolds, S. (1991). Psychological impact or unemployment: Interactive effects of vulnerability and protective factors on depression. *Journal of Counselling Psychology*, *38*, 76-84.

Richman, H., & Frueh, C. (1996). Personality disorder symptomatology among Vietnam veterans with combat related PTSD. *Anxiety*, *2*, 286-95.

Robins, C. (1988). Personal vulnerability, life events, and depressive symptoms: A test of specific interact ional model. *Journal of Personality and Social Psychology*, *54*, 847-852.

Robins, C., Block, P., & Peselow, E. (1989). Relations of sociotropic and autonomous personality characteristics to specific symptoms in depressed patients. *Journal of Abnormal Psychology*, *98*, 86-88.

Robins, C. (1990). Congruence of personality and life events in depression. *Journal of Abnormality Psychology*, *99*, 393-397.

Robins, C. & Luten, A. (1991). Sociotropy and autonomy: Differential patterns of clinical presentation in unipolar depression. *Journal of Abnormal Psychology*, *100,* 74-77.

Robins, C., Ladd, J., Welkowitz, J., Blaney, P., Diaz, R. & Kutcher, G. (1994). The Personal Style Inventory: Preliminary validation studies of new measures of sociotropy and autonomy. *Journal of Psychopathology and Behavioural Assessment, 16*, 277-300.

Robins, C., Bagby, R., Rector, N., Lynch, T., & Kennedy, S. (1997). Sociotropy, autonomy, and patterns of symptoms in patients with major depression: A comparison of dimensional and categorical approaches. *Cognitive Therapy and Research, 21*, 285-300.

Sarason, B., Shearin, E., & Pierce, G. (1987). A brief measure of social support: Practical and theoretical implications. *Journal of Social and Personal Relationships*, *4,* 497-510.

Sarason, Q., Levine, H., Basham, R., & Sarason, B. (1983). Assessing social support: The social support questionnaire. *Journal of Personality and Social Psychology*, *44*, 127-139.

Sato, T., & McCann, D. (1997). Vulnerability factors in depression: The facets of sociotropy and autonomy. *Journal of Psychopathology and Behavioral Assessment, 19,* 41-62.

Sato, T., McCann, D., & Ferguson-Isaac, C. (2004). Sociotrophy-autonomy and situation-specific anxiety. *Psychological Reports, 94*, 67-76.

Sherwood, R., Funari, D., & Piekarski, A. (1990). Adapted character styles of Vietnam veterans with posttraumatic stress disorder. *Psychological Reports, 66*, 623-631.

Solomon, Z., Mikulineer, M. & Hobfoll, S. (1986). The effects of social support and battle intensity on loneliness and breakdown during combat. *Journal of personality and social psychology*, *51*, 1269-1276.

Solomon, S., Smith, E., Robins, L., & Fischbach, R. (1987). Social involvement as a mediator of disaster-induced stress. *Journal of Applied Social Psychology*, *17*, 1092-1112.

Solomon, Z. (1993). *Combat stress reaction: The enduring toll of war*. New York: Plenum.

Solomon, A., Arnow, B., Gotlib, I., & Wind, B. (2003). Individualized measurement of irrational beliefs in remitted depressives. *Journal of Clinical Psychology, 59*, 439-455.

Southwick, S. Yehuda, R., & Giller, E. (1993). Personality disorders in treatment-seeking combat veterans with posttraumatic stress disorder. *American Journal of Psychiatry*, 1*50*, 1020-1023.

Southwick, S., Bremner, D., Krystal, J. & Charney, D. (1994). Psychobiologic research in post-traumatic stress disorder. *Psychiatric Clinics of North America, 17*, 251-264.

Sparr, L. (1995). Post-traumatic stress disorder. Does it exist? *Neurologic Clinics*, *13*, 413-429.

Steindl, S., Young, R., Creamer, M. & Crompton, D. (2003) Hazardous alcohol use and treatment outcome in male combat veterans with posttraumatic stress disorder. *Journal of Traumatic Stress*, *16*, 27-34.

Stephens, C. & Long, N. (1999). Posttraumatic stress disorder in the New Zealand police: the moderating role of social support following traumatic stress. *Anxiety, stress and coping, 12*, 247-259.

Tabachnick, B., Fiddell, L. (1996). *Using Multivariate Statistics*. New York: Harper Collins College Publishers.

Tedeschi, R., & Calhoun, L. (1995). *Trauma and transformation: Growing in the aftermath of suffering*. Thousand Oaks, California: Sage Publications.

Tomb, D. (1994). The phenomenology of post-traumatic stress disorder. *The Psychiatric Clinics of North America*, *17*, 237-250.

Trimble, M. (1985). Post-traumatic stress disorder: History of concept. In C. Figley (ed), *Trauma and its wake*, pp5-14. New York: Burnner/Mazel.

Turner Cobb, J. & Steptoe, A. (1988). Psychosocial influences on upper respiratory infectious illness in children. *Journal of Psychosomatic Research*, *45*, 319-330.

Tyler, P. & Cushway, D. (1995). Stress in nurses. The effects of coping and social support. *Stress Medicine*, *11*, 243-251.

Veronen, L. & Kilpatrick, D. (1983). Stress management for rape victims. In D. Meichenbaum & M. E. Jaremko (Eds.), *Stress reduction and prevention*. New York: Plenum Press.

Walker, J., & Cavenar, J. (1982). Vietnam veterans: Their problems continue. *Journal of nervous and mental disease, 170,* 174-179.

Weathers, R., Keane, T., & Davidson, R. (2001). Clinician-administered PTSD scale: a review of the first ten years of research. *Depression and Anxiety, 13,* 132-56.

Wenninger, K., & Ehlers, A. (1998). Dysfunctional cognitions and adult psychological functioning in child sexual abuse survivors. *Journal of Traumatic Stress, 11,* 281-300.

Wilson, J. (1994). The historical evolution of PTSD diagnostic criteria: From Freud to DSM-IV. *Journal of Traumatic Stress*, *7*, 681-698.

Wortman, C. (1984). Social support and the cancer patient: conceptual and methodological issues. *Cancer, 53*, 2339-2360.

Yehuda, R. (1998). Psychoneuroendocrinology of post-traumatic stress disorder. *Psychiatric Clinics of North America*, 21, 359-379.

Yehuda, R., McFarlane, A. & Shalev, A. (1998). Predicting the development of posttraumatic stress disorder from acute response to a traumatic event. *Biological Psychiatry, 44*, 1305-1313.

Young, A. (1995). Reasons and causes for post-traumatic stress disorder. *Transcultural Psychiatric Research Review*, *32*, 287-298.

Appendices

Appendix 1

Explanatory letter.

Project Title: Traumatic events and recovery: sociotropy, autonomy, and social supports as contributing factors
Project Number: RO423

My name is Sandra Lorensini and I am a psychologist in private practice studying towards my Doctorate degree in Psychology under the supervision of Professor Richard Hicks of Bond University, Queensland.

Our research project is investigating the relationship between traumatic life events, personality factors, the amount of social supports we have, and how this affects our ability to recover. Your participation in this research will help us examine these aspects and it is expected that results from this project will provide useful information for the future treatment of trauma.

The questionnaire package that follows is completely anonymous and the answers you provide will be used for the purpose of this research only. Please do not write your name or any identifying marks on the questionnaire to ensure anonymity. Your answers will in no way be individually identifiable and no individual results will be reported at any time.

Participation in this study is completely voluntary. Though your participation is highly appreciated, you are free to withdraw your participation at anytime. If you have any questions regarding this study, we will be happy to answer them before you fill in this questionnaire. Please answer all questions as honestly as you can.

If you have any questions or concerns over the research you are invited to contact Professor Richard Hicks, Professor of Psychology at Bond University on (07) 5595 2580 or myself (03) 53 387488. If you have any further queries or would like to be informed of any findings relating to this research project you may also contact Professor Hicks or myself.

Principal Investigator/Supervisor:	Student Researcher:
Professor Richard Hicks	Sandra Lorensini
Signature: ……	Signature:……..

Should you have any complaints concerning the manner in which this research is conducted, please do not hesitate to contact Bond University Research Ethics Committee quoting the Project Number RO423
Contact: The Complaints Officer, Bond University Human Research Ethics Committee, Bond University, Gold Coast, 4229. Telephone (07) 5595 4194 Fax+61 7 5595 100, Email mkendall@bond.edu.au

Appendix 2

THE SOCIAL SUPPORTS QUESTIONNAIRE – SHORT FORM (SSQ-6)

The following questions ask about people in your environment who provide you with help or support. Each question has two parts. For the first part, list all the people you know, EXCLUDING YOURSELF, whom you can count on for help or support in the manner described. Give the persons' initials and their relationship to you. LIST NO MORE THAN 9 PERSONS.

For the second part, use that rating scale provided to note HOW SATISFIED you are with the overall support you have for the area considered in the previous question. If you have no support for a question, mark "NO ONE", but rate your level of satisfaction as you would otherwise. Please answer all of the questions as best you can.

1a. Who can you really count on to be DEPENDABLE when you need help? Just write the initial of the person's name in the spaces below).

No one = [ ] or

1. [ ]
2. [ ]
3. [ ]
4. [ ]
5. [ ]
6. [ ]
7. [ ]
8. [ ]
9. [ ]

1b. How SATISFIED are you overall with the amount of support you get from being able to depend on the above people when you need help?

[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
very satisfied	fairly satisfied	a little satisfied	a little dissatisfied	fairly dissatisfied	very dissatisfied

Appendix 2 (continued)

2a. Who can you really count on to help you feel more relaxed when you are under pressure?

No one = [ ]

1. [ ]
2. [ ]
3. [ ]
4. [ ]
5. [ ]
6. [ ]
7. [ ]
8. [ ]
9. [ ]

2b. How satisfied are you overall with the amount of support from the above people when they help you to relax when you are under pressure or tense?

[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
very satisfied	fairly satisfied	a little satisfied	a little dissatisfied	fairly dissatisfied	very dissatisfied

3a. Who accepts you totally, including both your worst and your best points?

No one = [ ]

1. [ ]
2. [ ]
3. [ ]
4. [ ]
5. [ ]
6. [ ]
7. [ ]
8. [ ]
9. [ ]

3b. How satisfied are you overall with the support of being accepted totally by the above people?

[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
very satisfied	fairly satisfied	a little satisfied	a little dissatisfied	fairly dissatisfied	very dissatisfied

Appendix 2 (continued)

4a. Who can you really count on to care about you, regardless of what is happening to you?

No one = [ ] 1. [ ]
2. [ ]
3. [ ]
4. [ ]
5. [ ]
6. [ ]
7. [ ]
8. [ ]
9. [ ]

4b. How satisfied are you overall by the support of having the above people you can really count on, regardless of what is happening to you?

[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
very satisfied	fairly satisfied	a little satisfied	a little dissatisfied	fairly dissatisfied	very dissatisfied

5a. Who can you really count on to help you feel better when you are feeling generally down in the dumps?

No one = [ ] 1. [ ]
2. [ ]
3. [ ]
4. [ ]
5. [ ]
6. [ ]
7. [ ]
8. [ ]
9. [ ]

5b. How satisfied are you overall by having the support of the above people you can count on to help you feel better when you are feeling generally down in the dumps?

[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
very satisfied	fairly satisfied	a little satisfied	a little dissatisfied	fairly dissatisfied	very dissatisfied

Appendix 2 (continued)

6a. Who can you count on to console you when you are very upset?

No one = [ ]

1. [ ]
2. [ ]
3. [ ]
4. [ ]
5. [ ]
6. [ ]
7. [ ]
8. [ ]
9. [ ]

6b. How satisfied are you overall by having the support of the above people to console you when you are very upset?

[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
very satisfied	fairly satisfied	a little satisfied	a little dissatisfied	fairly dissatisfied	very dissatisfied

Appendix 2 (continued)

THE PERSONAL STYLE INVENTORY (PSI-11)

Here are a number of statements about personal characteristics. Please read each one carefully, and indicate whether you agree or disagree, and to what extent, by circling a number.

1 = Strongly disagree
2 = Disagree
3 = Slightly disagree
4 = Slightly agree
5 = Agree
6 = Strongly agree

1. I often put other people's needs before my own	1	2	3	4	5	6
2. I tend to keep other people at a distance	1	2	3	4	5	6
3. I find it difficult to be separated from people I love	1	2	3	4	5	6
4. I am easily bothered by other people making demands of me	1	2	3	4	5	6
5. I am very sensitive to the effects I have on the feelings of other people	1	2	3	4	5	6
6. I don't like relying on others for help	1	2	3	4	5	6
7. I am sensitive to criticism by others	1	2	3	4	5	6
8. It bothers me when I feel that I am only average and ordinary	1	2	3	4	5	6
9. I worry a lot about hurting or offending other people	1	2	3	4	5	6
10. When I'm feeling blue, I don't like to be offered sympathy	1	2	3	4	5	6
11. It is hard for me to break off a relationship even if it is making me unhappy	1	2	3	4	5	6
12. In relationships, people are often too demanding of one another	1	2	3	4	5	6
13. I am easily persuaded by others	1	2	3	4	5	6

Appendix 2 (continued)

14. I usually view my performance as a complete success or a complete failure	1	2	3	4	5	6
15. I try to please other people too much	1	2	3	4	5	6
16. I don't like people to invade my privacy	1	2	3	4	5	6
17. I find it difficult if I have to be alone all day	1	2	3	4	5	6
18. It is hard for me to take instruction from people who have authority over me	1	2	3	4	5	6
19. I often feel responsible for solving other people's problems	1	2	3	4	5	6
20. I often handle big decisions without telling anyone else about them	1	2	3	4	5	6
21. It is very hard for me to get over the feeling of loss when a relationship has ended	1	2	3	4	5	6
22. It is hard for me to have someone dependent on me	1	2	3	4	5	6
23. It is very important to me to be liked or admired by others	1	2	3	4	5	6
24. I feel badly about myself when I am not actively accomplishing things	1	2	3	4	5	6
25. I feel I have to be nice to other people	1	2	3	4	5	6
26. It is hard for me to express admiration or affection	1	2	3	4	5	6
27. I like to be certain that there is somebody close I can contact in case something unpleasant happens to me	1	2	3	4	5	6
28. It is difficult for me to make a long-term commitment to a relationship	1	2	3	4	5	6
29. I am too apologetic to other people	1	2	3	4	5	6
30. It is hard for me to open up and talk about my feelings/other personal things	1	2	3	4	5	6

Appendix 2 (continued)

31. I am very concerned with how people react to me	1	2	3	4	5	6
32. I have a hard time forgiving myself when I feel I haven't worked up to my potential	1	2	3	4	5	6
33. I get very uncomfortable when I'm not sure whether or not someone likes me	1	2	3	4	5	6
34. When making a big decision, I usually feel that advice from others is intrusive	1	2	3	4	5	6
35. It is hard for me to say "no" to other people's requests	1	2	3	4	5	6
36. I resent it when people try to direct my behaviour or activities	1	2	3	4	5	6
37. I become upset when something happens to me and there's nobody around to talk to	1	2	3	4	5	6
38. Personal questions from others usually feel like an invasion of my privacy	1	2	3	4	5	6
39. I am most comfortable when I know my behaviour is what others expect from me	1	2	3	4	5	6
40. I am very upset when other people or circumstances interfere with my plans	1	2	3	4	5	6
41. I often let people take advantage of me	1	2	3	4	5	6
42. I rarely trust the advice of others when making a big decision	1	2	3	4	5	6
43. I become very upset when a friend breaks a date or forgets to call me as planned	1	2	3	4	5	6
44. I become upset more than most people I know when limits are placed on my personal independence and freedom	1	2	3	4	5	6
45. I judge myself based on how I think others feel about me	1	2	3	4	5	6
46. I become very upset when others try to influence my thinking of a problem	1	2	3	4	5	6

Appendix 2 (continued)

47. It is hard for me to let people know when I am angry with them	1	2	3	4	5	6
48. I feel controlled when others have a say in my plans	1	2	3	4	5	6

Thank you for continuing to assist us in the study of personality factors and social supports as contributing factors in the recovery from traumatic events.

We appreciate you help.

The next questionnaire is short and gives data that will help us allow for special factors such as age, gender, educational level, occupation, and marital status in our study.

Please go straight to the next page.

Appendix 2 (continued)

BIO-DATA FORM

Your responses to the following questions will be kept anonymous.
Answering the questions will help us in our study.
Please place a tick in the bracket for the answer that best describes you.

1. Age_____years

2. Gender
   - Male [ ]
   - Female [ ]

3. Marital status
   - Married/de-facto [ ]
   - Separated [ ]
   - Widowed [ ]
   - Never married [ ]

4. Education level
   - Left before Year 10 [ ]
   - Completed Year 10 [ ]
   - Completed Year 12 [ ]
   - TAFE certificate [ ]
   - Diploma [ ]
   - Bachelor degree [ ]
   - Post graduate degree [ ]

5. Current position or occupation
   - Unemployed [ ]
   - Student [ ]
   - Employee [ ]
   - Self-employed [ ]
   - Middle manager [ ]
   - Professional [ ]
   - Senior Executive [ ]
   - Other-please specify_____

6. Date or approximate date of the traumatic event_____

7. Please provide a brief description of the traumatic event (e.g., road traffic accident, assault, etc.).

_____

_____

Psychologist's rating of event [1] [2] [3] [4] [5]

8. Do you feel you have recovered from that traumatic event
   - Physically: Completely [ ] Partly [ ]
   - Emotionally: Completely [ ] Partly [ ]

COMMENTS: If you wish to make any comments you may do so here briefly, or over the page.

Appendix 3

Diagnostic criteria for 308.3 Acute Stress Disorder

A. The person has been exposed to a traumatic event in which both of the following were present:

1. the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others.
2. the person's response involved intense fear, helplessness, or horror

B. Either while experiencing or after experiencing the distressing event, the individual has three (or more) of the following dissociative symptoms:

(1) a subjective sense of numbing, detachment, or absence or emotional responsiveness
(2) a reduction in awareness of his or her surroundings (e.g., "being in a daze")
(3) derealization
(4) depersonalisation
(5) dissociative amnesia (i.e., inability to recall an important aspect of the trauma)

C. The traumatic event is persistently re-experienced in at least one of the following ways: recurrent images, thoughts, dreams, illusions, flashback episodes, or a sense of reliving the experience, or distress on exposure to reminders of the traumatic event.

D. Marked avoidance of stimuli that arouse recollections of the trauma (e.g., thoughts, feelings conversations, activities, places, people).

E. Marked symptoms of anxiety or increased arousal (e.g., difficulty sleeping, irritability, poor concentration, hyper-vigilance, exaggerated startle response, motor restlessness).

F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or impairs the individual's ability to pursue some necessary task, such as obtaining necessary assistance or mobilizing personal resources by telling family members about the traumatic experience.

G. The disturbance lasts for a minimum of 2 days and a maximum of 4 weeks and occurs within 4 weeks of the traumatic event.

H. The disturbance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition, is not better accounted for by Brief Psychotic Disorder, and is not merely an exacerbation of a pre-existing Axis 1 or Axis 11 disorder.

Appendix 4

Acute Stress Disorder Interview

Criterion A		No	Yes
1.	When the trauma happened, did you think that you or someone else was going to be seriously injured or die?	1	0
2a.	When the trauma happened, did you feel very frightened?	1	0
2b.	When the trauma happened, did you feel that there was nothing you could do about it?	1	0

If Item 1 is coded 0 AND Item 2a and/or Item 2b are coded 1, Criterion A is met.

Criterion A met: No Yes

Criterion B		No	Yes
1.	During or since the trauma, have you felt numb or distant from your own emotions?	0	1
2.	During or since the trauma, have you felt less aware of your surroundings?	0	1
3.	During or since the trauma,have things around you seemed unreal?	0	1
4.	During or since the trauma, have you felt distant from your normal self or have you felt as though you were looking at yourself from outside?	0	1
5.	Have you been unable to recall some important aspect of the trauma?	0	1

For those items coded 1, ask:

How soon after the trauma did you first start having these problems?_____

When was the last time you had any of these problems? _____

If 3 or more of the Criterion B items are coded 1, Criterion B is met.

Criterion B met: No Yes

Criterion C		No	Yes
1.	Have you kept remembering the trauma even when you have not wanted to?	0	1
2.	Have you kept having bad dreams or nightmares about the trauma?	0	1
3.	Have you suddenly acted or felt as though the trauma were about to happen again, even though it wasn't?	0	1
4.	Do you feel very upset when you are reminded of the trauma?	0	1

For those items coded 1, ask:

How soon after the trauma did you first start having these problems? _____

When was the last time you had any of these problems? _____

If any of Criterion C items are coded 1, Criterion C is met.

Criterion C is met: No Yes

Criterion D		No	Yes
1.	Have you deliberately tried not to think about the trauma?	0	1
2.	Have you deliberately tried not to talk about the trauma?	0	1

Appendix 4 (continued)

3.	Have you avoided places or people or activities that may remind you of the trauma?	0	1
4.	Have you tried not to feel upset or distressed about the trauma?	0	1

For those items coded 1, ask:
How soon after the trauma did you first start having these problems? _____
When was the last time you had any of these problems? _____
If any of Criterion D items are coded 1, Criterion D is met.

Criterion D met:		No	Yes

Criterion E		No	Yes
1.	Since the trauma, have you had trouble sleeping?	0	1
2.	Since the trauma, have you felt unusually irritable or have you lost your temper a lot more than usual	0	1
3.	Since the trauma, have you had difficulty concentrating?	0	1
4.	Since the trauma, have you become much more concerned about danger or very much more careful?	0	1
5.	Since the trauma, have you become jumpy or do you get easily startled by ordinary noises or movements?	0	1
6.	When you are reminded of the trauma, do you sweat or tremble or does your heart beat faster?	0	1

For those items coded 1, ask:
How soon after the trauma did you first start having these problems _____
When was the last time you had any of these problems? _____
If any of Criterion E items are coded 1, Criterion E is met.

Criterion E met:		No	Yes

Criterion F		No	Yes
1.	Have you felt very upset by the symptoms you have experienced since the trauma?	0	1
2.	Have the problems which occurred as a result of the trauma kept you from normal socializing or talking with people?	0	1
3.	Have the problems which occurred as a result of the trauma kept you from completing your normal work?	0	1
4.	Have the problems which occurred as a result of the trauma kept you from doing other things you need to do?	0	1

For those items coded 1, ask:
How soon after the trauma did you first start having these problems? _____
When was the last time you had any of these problems? _____
If any of Criterion F items are coded 1, Criterion F is met.

Criterion F met:		No	Yes

Appendix 4 (continued)

1. Have you taken medication or used drugs or alcohol at the time of the trauma? No Yes

If yes, specify which _____

If yes, specify when was the last time_____

2. Have you suffered any medical conditions, including head injuries or losing consciousness, at the time or since the trauma? No Yes

If yes, specify which_____

If yes, specify when was the last time_____

If any Criterion G items are coded 1, consider if the substance use or medical condition may account for the previously described symptoms. If there is not evidence of substance use or medical condition accounting for the previously described symptoms, Criterion G is met.

Criterion G met: No Yes

Criterion H

Have the symptoms reported in the following criteria lasted longer than 2 days and less than 4 weeks after the trauma? This information is based on responses obtained in the relevant sections of the interview. (Note: Criterion B can occur during or following the trauma).

Criterion C: No Yes

Criterion D: No Yes

Criterion E: No Yes

If all Criterion H items are coded 1, Criterion H is met.

Criterion H met: **No** **Yes**

	Summary Scores		
Criterion	Met		Total Score (Sum of items Coded 1)
Criterion A	Yes	No	N/A
Criterion B	Yes	No	_____
Criterion C	Yes	No	_____
Criterion D	Yes	No	_____
Criterion E	Yes	No	_____
Criterion D	Yes	No	
Criterion E	Yes	No	
Criterion F	Yes	No	
Criterion G	Yes	No	
Criterion H	Yes	No	

ASD Criteria met: Yes No TOTAL_____

Appendix 5

Acute Stress Disorder Scale

		Not at all	Mildly	Medium	Quite a bit	Very much
1.	During or after the trauma did you ever feel numb or distant from your emotions?	1	2	3	4	5
2.	During or after the trauma, did ever feel in a daze?	1	2	3	4	5
3.	During or after the trauma, did things around you ever feel unreal or dreamlike?	1	2	3	4	5
4.	During or after the trauma, did you feel very distant from your normal self or like you were watching it happen from outside?	1	2	3	4	5
5.	Have you been unable to recall important aspects of the trauma?	1	2	3	4	5
6.	Have memories of the trauma kept entering your mind?	1	2	3	4	5
7.	Have you had bad dreams or nightmares about the trauma?	1	2	3	4	5
8.	Have you felt as if the trauma was about to happen again?	1	2	3	4	5
9.	Do you feel very upset when you are reminded of the trauma?	1	2	3	4	5
10.	Have you tried not to think about the trauma?	1	2	3	4	5
11.	Have you tried not to talk about the trauma?	1	2	3	4	5
12.	Have you tried to avoid situations or people that remind you of the trauma?	1	2	3	4	5
13.	Have you tried not to feel upset or distressed about the trauma?	1	2	3	4	5
14.	Have you had trouble sleeping since the trauma?	1	2	3	4	5
15.	Have you felt more irritable since the trauma?	1	2	3	4	5
16.	Have you had difficulty concentrating since the trauma?	1	2	3	4	5
17.	Have you been more alert to danger since the trauma?	1	2	3	4	5
18.	Have you become jumpy since the trauma?	1	2	3	4	5
19.	When you are reminded of the trauma do you sweat or tremble or does your heart beat faster?	1	2	3	4	5

Appendix 6

Diagnostic Criteria for 309.81 Posttraumatic Stress Disorder

A. The person has been exposed to a traumatic event in which both of the following were present:

(1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others
(2) the person's response involved intense fear, helplessness, or horror.

B. The traumatic event is persistently re-experienced in one (or more) of the following ways:

(1) recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions.
(2) recurrent distressing dreams of the event
(3) acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated).
(4) intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
(5) physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event

C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:

(1) efforts to avoid thoughts, feelings, or conversations associated with the trauma
(2) efforts to avoid activities, places, or people that arouse recollections of the trauma
(3) inability to recall an important aspect of the trauma
(4) markedly diminished interest or participation in significant activities
(5) feeling of detachment or estrangement from others
(6) restricted range of affect (e.g., unable to have loving feelings)
(7) a foreshortened future (e.g., does not expect to have a career, marriage, children or a normal life span).

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

(1) difficulty falling or staying asleep
(2) irritability or outbursts of anger
(3) difficulty concentrating
(4) hyper-vigilance
(5) exaggerated startle response

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

F. The disturbance causes clinical significant distress or impairment in social, occupational, or other important areas of functioning.

Appendix 7

CLINICIAN-ADMINISTERED PTSD SCALE FOR DSV-IV

Criterion A. The person has been exposed to a traumatic event in which both of the following were present: The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others. The person's response involved intense fear, helplessness, or horror.

I'm going to be asking you about some difficult or stressful things that sometimes happen to people. Some examples of this are being in some type of serious accident; being in a fire; a hurricane, or an earthquake; being mugged or beaten up or attacked with a weapon; or being forced to have sex when you didn't want to. I'll start by asking you to look over a list of experiences like this and check any that apply to you. Then, if any of them do apply to you, I'll ask you to briefly describe what happened and how you felt at the time.

Some of these experiences may be hard to remember or may bring back uncomfortable memories or feelings. People often find that talking about them can be helpful, but it's up to you to decide how much you want to tell me. As we go along, if you find yourself becoming upset, let me know and we can slow down and talk about it. Also, if you have any questions or you don't understand something, please let me know. Do you have any questions before we start?
ADMINISTER CHECKLIST, THEN REVIEW AND INQUIRE UP TO THREE EVENTS. IF MORE THAN THREE EVENTS ENDORSED, DETERMINE WHICH THREE EVENTS TO INQUIRE (E.G., FIRST, WORST, AND MOST RECENT EVENTS; THREE WORST EVENTS; TRAUMA OF INTEREST PLUS TWO OTHER WORST EVENTS, ETC.)

IF NO EVENT ENDORSED ON CHECKLIST: (Has there been a time when your life was in danger or you were seriously injured or harmed?)
IF NO: (What about a time when you were threatened by death or serious injury, Even if you weren't actually injured or harmed?)
IF NO: (What about witnessing something like this happening to someone else or finding out that it happened to someone close to you?)
IF NO: (What would you say are some of the most stressful experiences you have had over your life?)

EVENT #1
What happened? (How old were you? Who else was involved? How many times did this happen? Life threat? Serious injury?)

How did you respond emotionally? (Were you very anxious or frightened? Horrified? Helpless? How so? Were you stunned or in shock so that you didn't feel anything at all? What was that like? What did other people notice about your emotional response? What about after the event – how did you respond emotionally?

Appendix 7 (continued)

Describe (e.g., event type, victim, perpetrator, age, frequency)			
A. (1)			
Life threat?	NO	YES	[self____ other____]
Serious injury?	NO	YES	[self___ other____]
Threat to physical integrity?	NO	YES	[self____ other____]
A. (2)			
Intense fear/help/horror?	NO	YES	[during___after____]
Criterion A met?	NO	PROBABLE	YES

EVENT #2
What happened? (How old were you? Who else was involved? How many times did this happen? Life threat? Serious injury?)

How did you respond emotionally? (Were you very anxious or frightened? Horrified? Helpless? How so? Were you stunned or in shock so that you didn't feel anything at all? What was that like? What did other people notice about your emotional response? What about after the event – how did you respond emotionally?

Describe (e.g., event type, victim, perpetrator, age, frequency)			
A. (1)			
Life threat?	NO	YES	[self____ other____]
Serious injury?	NO	YES	[self___ other____]
Threat to physical integrity?	NO	YES	[self____ other____]
A. (2)			
Intense fear/help/horror?	NO	YES	[during___after____]
Criterion A met?	NO	PROBABLE	YES

EVENT #3
What happened? (How old were you? Who else was involved? How many times did this happen? Life threat? Serious injury?)

Appendix 7 (continued)

How did you respond emotionally? (Were you very anxious or frightened? Horrified? Helpless? How so? Were you stunned or in shock so that you didn't feel anything at all? What was that like? What did other people notice about your emotional response? What about after the event – how did you respond emotionally?

Describe (e.g., event type, victim, perpetrator, age, frequency)

A. (1)

Life threat?	NO	YES	[self____ other____]
Serious injury?	NO	YES	[self___ other____]
Threat to physical integrity?	NO	YES	[self____ other____]

A. (2)

Intense fear/help/horror?	NO	YES	[during___after____]
Criterion A met?	NO	PROBABLE	YES

For the rest of the interview, I want you to keep (EVENTS) in mind as I ask you some questions about how they may have affected you.
I'm going to ask you about twenty-five questions altogether. Most of them have two parts. First, I'll ask if you've ever had a particular problem, and if so, about how often in the past month(week). Then I'll ask you how much distress or discomfort that problem may have caused you.

Criterion B. The traumatic event is persistently reexperienced in one (or more) of the following ways:

1.(B-1). Recurrent and distressing recollections of the event, including images, thoughts, or perceptions.

Frequency
Have you ever had unwanted memories of (EVENT)? What were they like? (What did you remember?) [IF NOT CLEAR:] (Did they ever occur while you were awake, or only in dreams?) [EXCLUDE IF MEMORIES OCCURRED ONLY DURING DREAMS] How often have you had these memories in the past month (week)?

0 Never
1 Once or twice
2 Once or twice a week
3 Several times a week
4 Daily or almost every day

Description/Examples

Appendix 7 (continued)

Intensity
How much distress or discomfort did these memories cause you? Were you able to put them out of your mind and think about something else? (How hard did you have to try?) How much did they interfere with your life?

0 None
1 Mild, minimal distress or disruption of activities
2 Moderate, distress clearly present but still manageable, some disruption of activities
3 Severe, considerable distress, difficult y dismissing memories, marked disruption of activities
4 Extreme, incapacitating distress, cannot dismiss memories, unable to continue activities

QV (specify)
_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

2. (B-2) recurrent distressing dreams of the event.

Frequency
Have you ever had unpleasant dreams about (EVENT)? Describe a typical dream. (What happens in them?) How often have you had these dreams in the past month (week)?

0 Never
1 Once or twice
2 Once or twice a week
3 Several times a week
4 Daily or almost every day

Description/Examples

Appendix 7 (continued)

Intensity
How much distress or discomfort did these dreams cause you? Did they wake you up? [IF YES:] (What happened when you woke up? How long did it take you to get back to sleep?) [LISTEN FOR REPORT OF ANXIOUS AROUSAL, YELLING, ACTING OUT THE NIGHTMARE] (Did your dreams ever affect anyone else? How so?

0 None
1 Mild, minimal distress or disruption of activities
2 Moderate, awoke in distress but readily returned to sleep
3 Severe, considerable distress, difficulty returning to sleep
4 Extreme, incapacitating distress, did not return to sleep

QV (specify)
_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

3. (B-3) acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashbacks episodes, including those that occur on awakening or when intoxicated).

Frequency
Have you ever suddenly acted or felt as it (EVENT) were happening again? (Have you ever had flashbacks about EVENT?) [IF NOT CLEAR:] (Did this ever occur while you were awake, or only in dreams?) [EXCLUDE IF OCCURRRED ONLY DURING DREAMS] Tell me more about that. How often has that happened in the past month (week)?

0 Never
1 Once or twice
2 Once or twice a week
3 Several times a week
4 Daily or almost every day

Description/Examples

Appendix 7 (continued)

Intensity
How much did it seem as if (EVENT) were happening again? (Were you confused about where you actually were or what you were doing at the time?) How long did it last? What did you do while this was happening? (Did other people notice your behaviour? What did they say?)

0 No reliving
1 Mild, somewhat more realistic than just thinking about
2 Moderate, definite but transient dissociative quality, still very aware of surroundings, daydreaming quality
3 Severe, strongly dissociative (reports images, sounds, or smells) but retained some awareness of surroundings
4 Extreme, complete dissociation (flashback), no awareness of of surroundings, may be unresponsive, possible amnesia for the episode (blackout)
QV (specify)
_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

4. (B-4) intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

Frequency
Have you ever gotten emotionally upset when something reminded you of (EVENT)? (Has anything ever triggered bad feelings related to (EVENT?) What kinds of reminders made you upset? How often in the past month (week)?

0 Never
1 Once or twice
2 Once or twice a week
3 Several times a week
4 Daily or almost every day

Description/Examples

Appendix 7 (continued)

Intensity
How much distress or discomfort did (REMINDERS) cause you? Howlong did it last? How much did it interfere with life?

0 None
1 Mild, minimal distress or disruption of activities
2 Moderate, distress clearly present but still manageable, some disruption of activities
3 Severe, considerable distress, marked disruption of activities
4 Extreme, incapacitating distress, unable to continue activities.

QV (specify)
_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

5. (B-5) physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event

Frequency
Have you ever had any physical reactions when something reminded you of (EVENT)? (Did you body ever react in some way when something reminded you of (EVENT?) Can you give me some examples? (Did your heart race or did your breathing change? What about sweating or feeling really tense or shaky?) What kinds of reminders triggered these reactions? How often in the past month (week)

0 Never
1 Once or twice
2 Once or twice a week
3 Several times a week
4 Daily or almost every day

Description/Examples

Appendix 7 (continued)

Intensity
How strong were (PHYSICAL REACTIONS)? How long did they last? (Did they last even after you were out of the situation?)

0 No physical reactivity
1 Mild, minimal reactivity
2 Moderate, physical reactivity clearly present, may be sustained if Iexposure continues
3 Severe, marked physical reactivity, sustained throughout exposure
4 Extreme, dramatic physical reactivity sustained even after exposure has ended

QV (specify)
_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

Criterion C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:

6.(C-1)efforts to avoid thoughts, feelings, or conversations associated with the trauma

Frequency
Have you ever tried to avoid thoughts or feelings about (EVENT)? (What kinds of thoughts or feelings did you try to avoid?) What about trying to avoid talking with other people about it? (Why is that?) How often in the past month (week)?

0 Never
1 Once or twice
2 Once or twice a week
3 Several times a week
4 Daily or almost every day

Description/Examples

Appendix 7 (continued)

Intensity
How much effort did you make to avoid (THOUGHTS/FEELINGS/ /CONVERSATIONS)? (What kind of things did you do? What about drinking or using medication or street drugs?). [CONSIDER ALL ATTEMPTS AT AVOIDANCE INCLUDING DISTRACTION, SUPPRESSION, AND USE OF ALCOHOL/DRUGS] How much did that interfere with your life?

0 None
1 Mild, minimal effort, little or no disruption of activities
2 Moderate, some effort, avoidance definitely present, some disruption of activities
3 Severe, considerable effort, marked avoidance, marked disruption of activities, or involvement in certain activities as avoidant strategy
4 Extreme, drastic attempts at avoidance, unable to continue activities or excessive involvement in certain activities as avoidant strategy

QV(specify)
_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

7. (C-2) efforts to avoid activities, places, or people that arouse recollections of the trauma

Frequency
Have you ever tried to avoid certain activities, places, or people that reminded you of (EVENT)? (What kinds of things did you avoid? Why is that?) Howoften in the past month (week)?

0 Never
1 Once or twice
2 Once or twice a week
3 Several times a week
4 Daily or almost every day

Description/Examples

Appendix 7 (continued)

Intensity
How much effort did you make to avoid (ACTIVITIES/PLACES/ PEOPLE)? (What did you do instead?) How much did that interfere with your life?

0 None
1 Mild, minimal effort or no disruption of activities
2 Moderate, some effort, avoidance definitely present, some disruption of activities
3 Severe, considerable effort, marked avoidance, marked disruption of activities or involvement in certain activities as avoidant strategy
4 Extreme, drastic attempts at avoidance, unable to continue activities, or excessive involvement in certain activities as avoidant strategy

QV (specify)
_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

8. (C-3) inability to recall an important aspect of the trauma

Frequency
Have you had difficulty remembering some important parts of (EVENT)? Tell me more about that. (Do you feel you should be able to remember these things? Why do you thing you can't?) In the past month (week), how much of the important parts of (EVENT) have you had difficulty remembering? (What parts do you still remember?)

0 None, clear memory
1 Few aspects not remembered (less than 10%)
2 Some aspects not remembered (approx 20=30%)
3 Many aspects not remembered (approx 50-60%)
4 Most or all aspects not remembered (more than 80%)

Description/Examples

Appendix 7 (continued)

Intensity
How much difficulty did you have recalling important parts of (EVENT)?
(Were you able to recall more if you tried?)

0 None
1 Mild, minimal difficulty
2 Moderate, some effort, could recall with effort
3 Severe, considerable difficulty, even with effort
4 Extreme, completely unable to recall important aspects of event

QV (specify)
_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

9. (C-4) markedly diminished interest or participation in significant activities

Frequency
Have you been less interested in activities that you used to enjoy? (What kinds of things have you lost interest in? Are there some things you don't do at all anymore? Why is that? (EXCLUDE IF NO OPPORTUNITY, IF PHYSICALLY UNABLE< OR IF DEVELOPMENTALLY APPROPRIATE CHANGE IN PREFERRED ACTIVITIES) In the past months (week), how many activities have you been less interested in? (What kinds of things do you still enjoy doing?) When did you first start to feel that way? (After the [EVENT]?

0 None
1 Few activities (less than 10%)
2 Some activities (approx 20-30%)
3 Many activities (approx 50-60%)
4 Most or all activities (more than 80%)

Description/Examples

Appendix 7 (continued)

Intensity
How strong was you loss of interest? (Would you enjoy [ACTIVITIES] once you got started?)

0 No loss of interest
1 Mild, slight loss of interest, probably would enjoy after starting activities
2 Moderate, definite loss of interest, but still has some enjoyment of activities
3 Severe, marked loss of interest in activities
4 Extreme, complete loss of interest, no longer participates in any activities

QV (specify)
_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

10. (C-5) feeling of detachment or estrangement from others

Frequency
Have you ever felt distant or cut off from other people? What was that like? How much of the time in the past month (week) have you felt that way? When did you first start to feel that way? (After the [EVENT]?)

0 None of the time
1 Very little of the time (less than 10%)
2 Some of the time (approx 20-30%)
3 Much of the time (approx 50-60%)
4 Most of the time (more than 80%)

Description/Examples

Appendix 7 (continued)

Intensity
How strong were your feelings of being distant or cut off from others? (Who do you feel closest to? How many people do you feel comfortable talking with about personal things?)

0 No feelings of detachment or estrangement
1 Mild, may feel "out of synch" with others
2 Moderate, feelings of detachment clearly present, but still feels some interpersonal connection
3 Severe, marked feelings of detachment or estrangement from most people, may feel close to only one or two people
4 Extreme, feels completely detached or estranged from others, not close with anyone

QV (specify)
_____

Trauma-related? 1 definite 2 probable 3 unlikely
Current_____ Lifetime_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

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

Frequency
Have there been times when you felt emotionally numb or had trouble experiencing feelings like love or happiness? What was that like? (What feelings did you have trouble experiencing?) How much of the time in the past month (week) have you felt that way? When did you first start having trouble experiencing (EMOTIONS)? (After the [EVENT]?)

0 None of the time
1 Very little of the time (less than 10%)
2 Some of the time (approx 20-30%)
3 Much of the time (approx 50-60%)
4 Most or all of the time (more than 80%)

Description/Examples

Appendix 7 (continued)

Intensity
How much trouble did you have experiencing (EMOTIONS)? What kinds of feelings were you still able to experience?) [INCLUDE OBSERVATIOS OF RANGE OF AFFECT DURING INTERVIEW]

0 No reduction of emotional experience
1 Mild, slight reduction of emotional experience
2 Moderate, definite reduction of emotional experience, but still able to experience most emotions
3 Severe, marked reduction of experience of at least two primary emotions (e.g., love, happiness)
4 Extreme, completely lacking emotional experience

QV (specify)
_____

Trauma-related? 1 definite 2 probable 3 unlikely
Current_____ Lifetime _____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

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

Frequency
Have there been times when you felt there is no need to plan for the future, that somehow your future will be cut short? Why is that? [RULE OUT REALISTIC RISKS SUCH AS LIFE THREATENING MEDICAL CONDITIONS] How much of the time in the past month (week) have you felt that way? When did you first start to feel that way? (After the [EVENT]?)

0 None of the time
1 Very little of the time (less than 10%)
2 Some of the time (approx 20-30%)
3 Much of the time (approx 50-60%)
4 Most or all of the time (more than 80%)

Description/Examples

Appendix 7 (continued)

Intensity
How strong was this feeling that your future will be cut short? (How long do you think you will live? How convinced are you that you will die prematurely?)

0 No sense of foreshortened future
1 Mild, minimal effort or no disruption of activities
2 Moderate, sense of foreshortened future definitely present, but no specific prediction about longevity
3 Severe, marked sense of a foreshortened future, may make specific prediction about longevity
4 Extreme, overwhelming sense of a foreshortened future,completely convinced of premature death

QV (specify)
_____

Trauma-related? 1 definite 2 probable 3 unlikely
Current_____ Lifetime_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

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

13. (D-1) difficulty falling or staying asleep

Frequency
Have you had any problems falling or staying asleep? How often in the past month (week)? When did you first start having problems sleeping? (After the [EVENT]?)

0 Never
1 Once or twice
2 Once or twice a week
3 Several times a week
4 Daily or almost every day

Sleep onset problems?	Y	N
Mid-sleep awakening?	Y	N
Early a.m. awakening?	Y	N
Total # hrs sleep/night	_____	
Desired # hrs sleep/night	_____	

Appendix 7 (continued)

Intensity

How much of a problem did you have with your sleep? (How long did it take you to fall asleep? How often did you wake up in the night? Did you often wake up earlier than you wanted to? How many total hours did you sleep each night?)

0 No sleep problems
1 Mild, slightly longer latency, or minimal difficulty staying asleep (up to 30 minutes loss of sleep)
2 Moderate, definite sleep disturbance, clearly longer latency, or clear difficulty staying asleep (30-90 minutes loss of sleep)
3 Severe, much longer latency, or marked difficulty staying asleep (90 min to 3 hrs loss of sleep)
4 Extreme, very long latency, or profound difficulty staying asleep (>3 hrs loss of sleep)

QV (specify)

_____

Trauma-related? 1 definite 2 probable 3 unlikely

Current_____ Lifetime_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

14. (D-2) irritability or outbursts of anger

Frequency

Have there been times when you felt especially irritable or showed strong feelings of anger? Can you give me some examples? How often in the past month (week)? When did you first start feeling that way? (After the [EVENT]?)

0 Never
1 Once or twice
2 Once or twice a week
3 Several times a week
4 Daily or almost every day

Description/Examples

Appendix 7 (continued)

Intensity
How strong was your anger? (How did you show it?) [IF REPORTS SUPPRESSION:] (How hard was it for you to keep from showing your anger?) How long did it take you to calm down? Did your anger cause you any problems?

0 No irritability or anger
1 Mild, minimal irritability, may raise voice when angry
2 Moderate, definite irritability or attempts to suppress anger, but can recover quickly
3 Severe, marked irritability or marked attempts to suppress anger, may become verbally or physically aggressive when angry
4 Extreme, pervasive anger or drastic attempts to suppress anger, may have episodes of physical violence

QV (specify)
_____

Trauma-related? 1 definite 2 probable 3 unlikely
Current_____ Lifetime_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

15. (D-3) difficulty concentrating

Frequency
Have you found it difficult to concentrate on what you were doing or on things going on around you? What was that like? How much of the time in the past months (week)? When did you first start having trouble concentrating? (After the [EVENT]?)

0 None of the time
1 Very little of the time (less than 10%)
2 Some of the time (approx 20-30%)
3 Much of the time (approx 50-60%)
4 Most or all of the time (more than 80%)

Description/Examples

Appendix 7 (continued)

Intensity
How difficult was it for you to concentrate? [INCLUDE OBSERVATIONS OF CONCENTRATION AND ATTENTION IN INTERVIEW] How much did that interfere with your life?

0 No difficulty with concentration
1 Mild, only slight effort needed to concentrate, little or no disruption of activities
2 Moderate, definite loss of concentration but could concentrate with effort, some disruption of activities
3 Severe, marked loss of concentration even with effort, marked disruption of activities
4 Extreme, complete inability to concentrate, unable to engage in activitiess

QV (specify)
_____

Trauma-related? 1 definite 2 probable 3 unlikely
Current _____ Lifetime _____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

16. (D-4) hyper-vigilance

Frequency
Have you been especially alert or watchful, even when there was no real need to be? (Have you felt as if you were constantly on guard?) Why is that? How much of the time in the past month (week)? When did you first start acting that way? (After the [EVENT]?)

0 None of the time
1 Very little of the time (less than 10%)
2 Some of the time (approx 20-30%)
3 Much of the time (approx 50-60%)
4 Most or all of the time (more than 80%)

Description/Examples

Appendix 7 (continued)

Intensity

How hard did you try to be watchful of things going on around you? [INCLUDE OBSERVATIONS OF HYPERVIGILANCE IN INTERVIEW] Did your (HYPERVIGILANCE) cause you any problems?

0 No hyper-vigilance
1 Mild, minimal hyper-vigilance, slight heightening of awareness
2 Moderate, hyper-vigilance clearly present, watchful in public (e.g., chooses safe place to sit in a restaurant or movie theatre)
3 Severe, marked hyper-vigilance, very alert, scans environment for danger, exaggerated concern for safety of self/family/home
4 Extreme, excessive hyper-vigilance, efforts to ensure safety consume significant time and energy and may involve extensive safety/checking behaviours, marked watchfulness during interview

QV (specify)

_____

Trauma-related? 1 definite 2 probable 3 unlikely

Current_____ Lifetime _____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

17. (D-5) exaggerated startle response

Frequency

Have you had any strong startle reactions? When did that happen? (What kinds of things made you startle?) How often in the past month (week)? When did you first have these reactions> (After the [EVENT]?)

0 Never
1 Once or twice
2 Once or twice a week
3 Several times a week
4 Daily or almost every day

Description/Examples

Appendix 7 (continued)

Intensity
How strong were these startle reactions? (How strong were they compared to how most people would respond?) How long did they last?

0 No startle reaction
1 Mild, minimal reaction
2 Moderate, definite startle reaction, feels "jumpy"
3 Severe, marked startle reaction, sustained arousal following initial reaction
4 Extreme, excessive startle reaction, overt coping behaviour (e.g., combat veteran who "hits the dirt")

QV (specify)
_____

Trauma-related? 1 definite 2 probable 3 unlikely
Current_____ Lifetime_____

Past week	Past month	Lifetime
F_____ I_____	F_____I_____	F_____I_____
	Sx: Y N	Sx: Y N

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

18. onset of symptoms

(IF NOT ALREADY CLEAR) When did you first start having (PTSD SYMPTOMS) you've told me about? (How long after the trauma did they start? More than six months?)

_____ total # months delay in onset
With delayed onset (> 6 months)? NO YES

19. duration of symptoms

[CURRENT] How long have these (PTST SYMPTOMS) lasted altogether?

	Current		Lifetime	
Duration more than 1 month?	NO	YES	NO	YES
Total # months duration	_____		_____	

[LIFETIME] How long did these (PTSD SYMPTOMS) last altogether? Acute (< 3 months) or

Chronic (> 3 months)	acute	chronic	acute	chronic

Appendix 7 (continued)

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

20. subjective distress

[CURRENT] Overall, how much have you been bothered by these (PTSD SYMPTOMS) you've told me about? [CONSIDER DISTRESS REPORTED ON EARLIER ITEMS]

0 None
1 Mild, minimal distress
2 Moderate, distress clearly present but still manageable
3 Severe, considerable distress
4 Extreme, incapacitating distress

[LIFETIME] Overall, how much were you bothered by these (PTSD SYMPTOMS) you've told me about? [CONSIDER DISTRESS REPORTED ON EARLIER ITEMS]

0 None
1 Mild, minimal distress
2 Moderate, distress clearly present but still manageable
3 Severe, considerable distress
4 Extreme, incapacitating distress

Past week	Past month	Lifetime
_____	_____	_____

21. impairment in social functioning

[CURRENT] Have these (PTSD SYMPTOMS) affected your relationship with other people? How so? [CONSIDER IMPAIRMENT IN SOCIAL FUNCTIONING REPORTED ON EARLIER ITEMS]

0 No adverse impact
1 Mild impact, minimal impairment in social functioning
2 Moderate impact, definite impairment but many aspects of social functioning still intact
3 Severe impact, marked impairment, few aspects of social functioning still intact
4 Extreme impact, little or no social functioning aspects of social functioning still intact

[LIFETIME] Did these (PTSD SYMPTOMS) affect your social life? How so? [CONSIDER IMPAIRMENT IN SOCIAL FUNCTIONING REPORTED ON EARLIER ITEMS]

0 No adverse impact
1 Mild impact, minimal impairment in social functioning
2 Moderate impact, definite impairment, but many aspects of social social functioning still intact
3 Severe impact, marked impairment, few aspects of social functioning still intact
4 Extreme impact, little or no social functioning

Past week	Past month	Lifetime
_____	_____	_____

Appendix 7 (continued)

22. impairment in occupational or other important areas of functioning

[CURRENT – IF NOT ALREADY CLEAR] Are you working now?
IF YES: Have these (PTSD SYMPTOMS) affected your work or your ability to work? How so? [CONSIDER REPORTED WORK HISTORY, INCLUDING NUMBER AND DURATION OF JOBS, AS WELL AS THE QUALITY OF WORK RELATIONSHIPS. IF PREMORBID FUNCTIONING IS UNCLEAR, INQUIRE ABOUT WORK EXPERIENCES BEFORE THE TRAUMA.
IF NO: Have these (PTSD SYMPTOMS) affected any other important part of your life? [AS APPROPRIATE, SUGGEST EXAMPLES SUCH AS PARENTING, HOUSEWORK, SCHOOLWORK, VOLUNTEER WORK, ETC). How so?

[LIFETIME – IF NOT ALREADY CLEAR] Were you working then?
IF YES: Did these (PTSD SYMPTOMS) affect your work or your ability to work? How so? [CONSIDER REPORTED WORK HISTORY, INCLUDING NUMBER AND DURATION OF JOBS, AS WELL AS THE QUALITY OF WORK RELATIONSHIPS. IF PREMORBID FUNCTIONING IS UNCLEAR, INQUIRE ABOUT WORK EXPERIENCES BEFORE THE TRAUMA.
IF NO: Did these (PTST SYMPTOMS) affect any other important part of your life? [AS APPROPRIATE, SUGGEST EXAMPLES SUCH AS PARENTING, HOUSEWORK, SCHOOLWORK, VOLUNTEER WORK, ETC.]
How so?

0 No adverse impact
1 Mild impact, minimal impairment in occupational/other important functioning
2 Moderate impact, definite impairment, but many aspects of occupational/ other important functioning still intact
3 Severe impact, marked impairment, few aspects of occupational/other important functioning still intact
4 Extreme impact, little or no occupational/other important functioning

Past week	Past month	Lifetime
_____	_____	_____

Global Ratings

23. global validity

ESTIMATE THE OVERALL VALIDITY OF RESPONSES, CONSIDER FACTORS SUCH AS COMPLIANCE WITH THE INTERVIEW, MENTAL STATUS, (E.G., PROBLEMS WITH CONCENTRATION, COMPREHENSION OF ITEMS, DISSOCIATION) AND EVIDENCE OF EFFORTS TO EXAGGERATE OR MINIMIZE SYMPTOMS.

0 Excellent, no reason to suspect invalid responses
1 Good, factors present that may adversely affect validity
2 Fair, factors present that definitely reduce validity
3 Poor, substantially reduced validity
4 Invalid responses, severely impaired mental status or possible deliberate 'faking bad' or 'faking good'

Appendix 7 (continued)

24. global severity

ESTIMATE THE OVERALL SEVERITY OF PTSD SYMPTOMS. CONSIDER DEGREE OF SUBJECTIVE DISTRESS, DEGREE OF FUNCTIONAL IMPAIRMENT, OBSERVATIONS OF BEHAVIOURS IN INTERVIEW, AND JUDGEMENT REGARDING REPORTING STYLE		
0	No clinically significant symptoms, no distress and no functional impairment	Past week
1	Mild, minimal distress or functional impairment	_____
2	Moderate, definite distress or functional impairment but functions satisfactorily with effort	Past month
3	Severe, considerable distress or functional impairment, limited functioning even with effort	_____
4	Extreme, marked distress or marked impairment in two or more major areas of functioning	Lifetime
		_____

Current PTSD Symptoms		
Criterion A met (traumatic event	NO	YES
_____# Criterion B sx (≥ 1)?	NO	YES
_____# Criterion C sx (≥3)?	NO	YES
_____# Criterion D sx (≥2)?	NO	YES
CRITERION E met (duration ≥ 1 month)?	NO	YES
CRITERION F met (distress/impairment)?	NO	YES
CURRENT PTSD (Criteria A-F met)?	NO	YES

IF CURRENT CRITERIA ARE NOT MET, ASSESS FOR LIFETIME PTSD. IDENTIFY A PERIOD OF AT LEAST A MONTH SINCE THE TRAUMATIC EVENT IN WHICH SYMPTOMS WERE WORSE

Since the (EVENT), has there been a time when these (PTSD SYMPTOMS) were a lot worse than they have been in the past month? When was that? How long did it last? (At least a month?)

IF MULTIPLE PERIODS IN THE PAST: When were you bothered the most by these (PTSD SYMPTOMS)?

Appendix 7 (continued)

IF AT LEAST ONE PERIOD, INQUIRE ITEMS 1-17, CHANGING FREQUENCY PROMPTS TO REFER TO WORST PERIOD: During that time, did you (EXPERIENCE SYMPTOM)? How often?

Lifetime PTSD Symptoms		
Criterion A met (traumatic event)?	NO	YES
_____ # Criterion B sx (≥ 1)?	NO	YES
_____ # Criterion C sx (≥ 3)?	NO	YES
_____# Criterion D sx (≥2)?	NO	YES
Criterion E met (duration ≥ 1 month)?	NO	YES
Criterion F met (distress/impairment)?	NO	YES
LIFETIME PTSD (Criteria A-F met)?	NO	YES

Appendix 7 (continued)

LIFE EVENTS CHECKLIST

Listed below are a number of difficult or stressful things that sometimes happen to people. For each event check one or more of the boxes to the right to indicate that: (a) it happened to you personally, (b) you witnessed it happen to someone else, (c) you learned about it happening to someone else close to you, (d) you're not sure if it fits, or (e) it doesn't apply to you. Be sure to consider your entire life (growing up as well as adulthood) as you go through the list of events.

Event	*Happened to me*	*Witnessed it*	*Learned about it*	*Not sure*	*Doesn't apply*
1. Natural disaster (e.g., flood, hurricane, tornado, earthquake					
2. Fire or explosion					
3. Transportation accident (e.g., car accident, boat accident, train wreck, plane crash)					
4 Serious accident at work, home, or during recreational activity					
5 Exposure to toxic substance (e.g., dangerous chemicals, radiation)					
6, Physical assault (e.g., being attacked, hit, slapped, kicked, beaten up)					
7. Assault with a weapon (e.g., being shot, stabbed, threatened with a knife, gun, bomb					
8 Sexual assault (rape, attempted rape, made to perform any type of sexual act through					
9.Other unwanted or uncomfortable sexual experience					
10.Combat or exposure to war-zone (in the military or as a civilian)					
11.Captivity (e.g., being kidnapped, abducted, held hostage, prisoner of war)					
12. Life-threatening illness or injury					
13. Severe human suffering					
14. Sudden, violent death (e.g., homicide, suicide)					
15.Sudden, unexpected death of someone close to you					
16. Serious injury, harm, death you caused to someone else					
17. Any other very stressful event/experience					

General Linear Model

Notes

Output Created		09-SEP-2005 09:39:21
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	55
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		GLM sociotropy autonomy BY group /METHOD = SSTYPE(3) /INTERCEPT = INCLUDE /EMMEANS = TABLES(group) /PRINT = DESCRIPTIVE ETASQ HOMOGENEITY /CRITERIA = ALPHA(.05) /DESIGN = group .
Resources	Elapsed Time	0:00:00.45

Between-Subjects Factors

		N
Group	1.00	20
	2.00	31

Descriptive Statistics

	group	Mean	Std. Deviation	N
Sociotropy	1.00	81.9000	12.90002	20
	2.00	104.9677	16.51158	31
	Total	95.9216	18.87310	51
Autonomy	1.00	76.8000	18.41795	20
	2.00	98.7419	17.43553	31
	Total	90.1373	20.69688	51

Box's Test of Equality of Covariance Matrices(a)

Box's M	10.578
F	3.359
df1	3
df2	73415.204
Sig.	.018

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a Design: Intercept+group

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.981	1251.684(a)	2.000	48.000	.000	.981
	Wilks' Lambda	.019	1251.684(a)	2.000	48.000	.000	.981
	Hotelling's Trace	52.153	1251.684(a)	2.000	48.000	.000	.981
	Roy's Largest Root	52.153	1251.684(a)	2.000	48.000	.000	.981
Group	Pillai's Trace	.445	19.251(a)	2.000	48.000	.000	.445
	Wilks' Lambda	.555	19.251(a)	2.000	48.000	.000	.445
	Hotelling's Trace	.802	19.251(a)	2.000	48.000	.000	.445
	Roy's Largest Root	.802	19.251(a)	2.000	48.000	.000	.445

a Exact statistic
b Design: Intercept+group

Levene's Test of Equality of Error Variances(a)

	F	df1	df2	Sig.
sociotropy	.665	1	49	.419
autonomy	.595	1	49	.444

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a Design: Intercept+group

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Et Squared
Corrected Model	sociotropy	6468.919(a)	1	6468.919	27.950	.000	.3
	autonomy	5852.904(b)	1	5852.904	18.425	.000	.2
Intercept	sociotropy	424512.213	1	424512.213	1834.188	.000	.9
	autonomy	374613.374	1	374613.374	1179.306	.000	.9
Group	sociotropy	6468.919	1	6468.919	27.950	.000	.3
	autonomy	5852.904	1	5852.904	18.425	.000	.2
Error	sociotropy	11340.768	49	231.444			
	autonomy	15565.135	49	317.656			
Total	sociotropy	487058.000	51				
	autonomy	435779.000	51				
Corrected Total	sociotropy	17809.686	50				
	autonomy	21418.039	50				

a R Squared = .363 (Adjusted R Squared = .350)
b R Squared = .273 (Adjusted R Squared = .258)

Estimated Marginal Means

group

Dependent Variable	Group	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
sociotropy	1.00	81.900	3.402	75.064	88.736
	2.00	104.968	2.732	99.477	110.459
autonomy	1.00	76.800	3.985	68.791	84.809
	2.00	98.742	3.201	92.309	105.175

General Linear Model

Notes

Comments		09-SEP-2005 09:40:29
Input		C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	55
issing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		GLM Concernothers dependency Pleaseothers perfection control defensive BY group /METHOD = SSTYPE(3) /INTERCEPT = INCLUDE /EMMEANS = TABLES(group) /PRINT = DESCRIPTIVE ETASQ HOMOGENEITY /CRITERIA = ALPHA(.05) /DESIGN = group .
Resources	Elapsed Time	0:00:00.02

Between-Subjects Factors

		N
group	1.00	20
	2.00	31

Descriptive Statistics

	group	Mean	Std. Deviation	N
Concernothers	1.00	20.6000	3.80305	20
	2.00	30.6774	6.61507	31
	Total	26.7255	7.51286	51
Dependency	1.00	25.3500	5.10186	20
	2.00	28.1935	5.90152	31
	Total	27.0784	5.72309	51
Pleaseothers	1.00	35.9500	7.36617	20
	2.00	46.0968	7.48935	31
	Total	42.1176	8.90539	51
perfection	1.00	13.5000	3.60555	20
	2.00	18.8065	3.78082	31
	Total	16.7255	4.51255	51
control	1.00	25.0500	6.09983	20
	2.00	32.3871	6.89288	31
	Total	29.5098	7.46558	51
defensive	1.00	38.2500	10.74036	20
	2.00	47.5484	10.32744	31
	Total	43.9020	11.35122	51

Box's Test of Equality of Covariance Matrices(a)

Box's M	57.078
F	2.331
df1	21
df2	6052.899
Sig.	.001

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.
a Design: Intercept+group

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.984	442.171(a)	6.000	44.000	.000	.984
	Wilks' Lambda	.016	442.171(a)	6.000	44.000	.000	.984
	Hotelling's Trace	60.296	442.171(a)	6.000	44.000	.000	.984
	Roy's Largest Root	60.296	442.171(a)	6.000	44.000	.000	.984
Group	Pillai's Trace	.518	7.882(a)	6.000	44.000	.000	.518
	Wilks' Lambda	.482	7.882(a)	6.000	44.000	.000	.518
	Hotelling's Trace	1.075	7.882(a)	6.000	44.000	.000	.518
	Roy's Largest Root	1.075	7.882(a)	6.000	44.000	.000	.518

a Exact statistic
b Design: Intercept+group

Levene's Test of Equality of Error Variances(a)

	F	df1	df2	Sig.
Concernothers	4.431	1	49	.040
Dependency	.340	1	49	.562
Pleaseothers	.076	1	49	.784
Perfection	.037	1	49	.848
Control	.034	1	49	.855
Defensive	.390	1	49	.535

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a Design: Intercept+group

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Et Squared
Corrected Model	Concernothers	1234.583(a)	1	1234.583	38.105	.000	.4
	dependency	98.298(b)	1	98.298	3.129	.083	.0
	Pleaseothers	1251.634(c)	1	1251.634	22.601	.000	.3
	perfection	342.318(d)	1	342.318	24.819	.000	.3
	control	654.440(e)	1	654.440	15.039	.000	.2
	defensive	1051.082(f)	1	1051.082	9.553	.003	.1
Intercept	Concernothers	31964.936	1	31964.936	986.588	.000	.9
	dependency	34852.651	1	34852.651	1109.388	.000	.9
	Pleaseothers	81836.027	1	81836.027	1477.696	.000	.9
	perfection	12688.201	1	12688.201	919.926	.000	.9
	control	40105.734	1	40105.734	921.623	.000	.9
	defensive	89491.082	1	89491.082	813.340	.000	.9
group	Concernothers	1234.583	1	1234.583	38.105	.000	.4
	dependency	98.298	1	98.298	3.129	.083	.0
	Pleaseothers	1251.634	1	1251.634	22.601	.000	.3
	perfection	342.318	1	342.318	24.819	.000	.3
	control	654.440	1	654.440	15.039	.000	.2
	defensive	1051.082	1	1051.082	9.553	.003	.1
Error	Concernothers	1587.574	49	32.399			
	dependency	1539.389	49	31.416			
	Pleaseothers	2713.660	49	55.381			
	perfection	675.839	49	13.793			
	control	2132.305	49	43.516			
	defensive	5391.427	49	110.029			
Total	Concernothers	39249.000	51				
	dependency	39033.000	51				
	Pleaseothers	94434.000	51				
	perfection	15285.000	51				
	control	47199.000	51				
	defensive	104739.000	51				
Corrected Total	Concernothers	2822.157	50				
	dependency	1637.686	50				
	Pleaseothers	3965.294	50				
	perfection	1018.157	50				
	control	2786.745	50				
	defensive	6442.510	50				

a R Squared = .437 (Adjusted R Squared = .426)
b R Squared = .060 (Adjusted R Squared = .041)
c R Squared = .316 (Adjusted R Squared = .302)
d R Squared = .336 (Adjusted R Squared = .323)
e R Squared = .235 (Adjusted R Squared = .219)
f R Squared = .163 (Adjusted R Squared = .146)

Estimated Marginal Means

group

Dependent Variable	group	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Concernothers	1.00	20.600	1.273	18.042	23.158
	2.00	30.677	1.022	28.623	32.732
dependency	1.00	25.350	1.253	22.831	27.869
	2.00	28.194	1.007	26.171	30.217
Pleaseothers	1.00	35.950	1.664	32.606	39.294
	2.00	46.097	1.337	43.411	48.783
perfection	1.00	13.500	.830	11.831	15.169
	2.00	18.806	.667	17.466	20.147
control	1.00	25.050	1.475	22.086	28.014
	2.00	32.387	1.185	30.006	34.768
defensive	1.00	38.250	2.346	33.537	42.963
	2.00	47.548	1.884	43.762	51.334

General Linear Model

Notes

Output Created		09-SEP-2005 09:42:48
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	55
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		GLM asdissociation asreexperience asavoid asarousal BY group /METHOD = SSTYPE(3) /INTERCEPT = INCLUDE /EMMEANS = TABLES(group) /PRINT = DESCRIPTIVE ETASQ HOMOGENEITY /CRITERIA = ALPHA(.05) /DESIGN = group .
Resources	Elapsed Time	0:00:00.02

Between-Subjects Factors

		N
group	1.00	20
	2.00	31

Descriptive Statistics

	group	Mean	Std. Deviation	N
asdissociation	1.00	13.7000	1.75019	20
	2.00	19.4516	3.61330	31
	Total	17.1961	4.12805	51
asreexperience	1.00	13.6500	2.15883	20
	2.00	16.7419	3.04377	31
	Total	15.5294	3.10711	51
asavoid	1.00	13.7500	2.61323	20
	2.00	16.3871	2.80092	31
	Total	15.3529	2.99882	51
asarousal	1.00	21.8500	3.48342	20
	2.00	25.0968	3.90175	31
	Total	23.8235	4.03835	51

Box's Test of Equality of Covariance Matrices(a)

Box's M	19.694
F	1.782
df1	10
df2	7668.989
Sig.	.058

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a Design: Intercept+group

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.985	778.235(a)	4.000	46.000	.000	.985
	Wilks' Lambda	.015	778.235(a)	4.000	46.000	.000	.985
	Hotelling's Trace	67.673	778.235(a)	4.000	46.000	.000	.985
	Roy's Largest Root	67.673	778.235(a)	4.000	46.000	.000	.985
group	Pillai's Trace	.526	12.755(a)	4.000	46.000	.000	.526
	Wilks' Lambda	.474	12.755(a)	4.000	46.000	.000	.526
	Hotelling's Trace	1.109	12.755(a)	4.000	46.000	.000	.526
	Roy's Largest Root	1.109	12.755(a)	4.000	46.000	.000	.526

a Exact statistic

b Design: Intercept+group

Levene's Test of Equality of Error Variances(a)

	F	df1	df2	Sig.
asdissociation	12.029	1	49	.001
asreexperience	1.733	1	49	.194
asavoid	.665	1	49	.419
asarousal	.118	1	49	.733

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a Design: Intercept+group

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Et Squared
Corrected Model	asdissociation	402.162(a)	1	402.162	43.803	.000	.4
	asreexperience	116.220(b)	1	116.220	15.539	.000	.2
	asavoid	84.542(c)	1	84.542	11.346	.001	.1
	asarousal	128.152(d)	1	128.152	9.137	.004	.1
Intercept	asdissociation	13360.750	1	13360.750	1455.234	.000	.9
	asreexperience	11228.926	1	11228.926	1501.335	.000	.9
	asavoid	11041.405	1	11041.405	1481.845	.000	.9
	asarousal	26793.721	1	26793.721	1910.329	.000	.9
group	asdissociation	402.162	1	402.162	43.803	.000	.4
	asreexperience	116.220	1	116.220	15.539	.000	.2
	asavoid	84.542	1	84.542	11.346	.001	.1
	asarousal	128.152	1	128.152	9.137	.004	.1
Error	asdissociation	449.877	49	9.181			
	asreexperience	366.485	49	7.479			
	asavoid	365.105	49	7.451			
	asarousal	687.260	49	14.026			
Total	asdissociation	15933.000	51				
	asreexperience	12782.000	51				
	asavoid	12471.000	51				
	asarousal	29761.000	51				
Corrected Total	asdissociation	852.039	50				
	asreexperience	482.706	50				
	asavoid	449.647	50				
	asarousal	815.412	50				

a R Squared = .472 (Adjusted R Squared = .461)
b R Squared = .241 (Adjusted R Squared = .225)
c R Squared = .188 (Adjusted R Squared = .171)
d R Squared = .157 (Adjusted R Squared = .140)

Estimated Marginal Means

group

Dependent Variable	group	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
asdissociation	1.00	13.700	.678	12.338	15.062
	2.00	19.452	.544	18.358	20.545
asreexperienc e	1.00	13.650	.612	12.421	14.879
	2.00	16.742	.491	15.755	17.729
asavoid	1.00	13.750	.610	12.523	14.977
	2.00	16.387	.490	15.402	17.372
asarousal	1.00	21.850	.837	20.167	23.533
	2.00	25.097	.673	23.745	26.448

General Linear Model

Notes

Output Created		09-SEP-2005 09:44:12
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	55
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		GLM ssdepend ssrelax ssaccept sscare sscount ssconsol BY group /METHOD = SSTYPE(3) /INTERCEPT = INCLUDE /EMMEANS = TABLES(group) /PRINT = DESCRIPTIVE ETASQ HOMOGENEITY /CRITERIA = ALPHA(.05) /DESIGN = group .
Resources	Elapsed Time	0:00:00.02

Between-Subjects Factors

		N
group	1.00	20
	2.00	31

Descriptive Statistics

	group	Mean	Std. Deviation	N
ssdepend	1.00	7.2000	2.19089	20
	2.00	4.6774	2.50848	31
	Total	5.6667	2.67333	51
ssrelax	1.00	5.4000	2.28035	20
	2.00	2.8065	1.95652	31
	Total	3.8235	2.43069	51
ssaccept	1.00	7.4000	2.01050	20
	2.00	3.1290	2.37686	31
	Total	4.8039	3.05954	51
sscare	1.00	6.9500	2.30503	20
	2.00	3.1935	2.31545	31
	Total	4.6667	2.94392	51
sscount	1.00	5.2000	2.06729	20
	2.00	2.8065	1.99030	31
	Total	3.7451	2.32244	51
ssconsol	1.00	4.4500	2.18789	20
	2.00	2.2258	1.66753	31
	Total	3.0980	2.16569	51

Box's Test of Equality of Covariance Matrices(a)

Box's M	23.586
F	.963
df1	21
df2	6052.899
Sig.	.507

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.
a Design: Intercept+group

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.878	52.817(a)	6.000	44.000	.000	.878
	Wilks' Lambda	.122	52.817(a)	6.000	44.000	.000	.878
	Hotelling's Trace	7.202	52.817(a)	6.000	44.000	.000	.878
	Roy's Largest Root	7.202	52.817(a)	6.000	44.000	.000	.878
group	Pillai's Trace	.501	7.366(a)	6.000	44.000	.000	.501
	Wilks' Lambda	.499	7.366(a)	6.000	44.000	.000	.501
	Hotelling's Trace	1.004	7.366(a)	6.000	44.000	.000	.501
	Roy's Largest Root	1.004	7.366(a)	6.000	44.000	.000	.501

a Exact statistic
b Design: Intercept+group

Levene's Test of Equality of Error Variances(a)

	F	df1	df2	Sig.
ssdepend	.114	1	49	.738
ssrelax	.657	1	49	.421
ssaccept	.660	1	49	.420
sscare	.040	1	49	.842
sscount	.000	1	49	.988
ssconsol	.967	1	49	.330

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a Design: Intercept+group

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Et Squared
Corrected Model	ssdepend	77.359(a)	1	77.359	13.539	.001	.2
	ssrelax	81.773(b)	1	81.773	18.755	.000	.2
	ssaccept	221.755(c)	1	221.755	44.120	.000	.4
	sscare	171.545(d)	1	171.545	32.109	.000	.3
	sscount	69.648(e)	1	69.648	17.060	.000	.2
	ssconsol	60.140(f)	1	60.140	16.900	.000	.2
Intercept	ssdepend	1715.006	1	1715.006	300.154	.000	.8
	ssrelax	818.714	1	818.714	187.780	.000	.7
	ssaccept	1347.716	1	1347.716	268.138	.000	.8
	sscare	1250.839	1	1250.839	234.124	.000	.8
	sscount	779.295	1	779.295	190.890	.000	.7
	ssconsol	541.788	1	541.788	152.249	.000	.7
group	ssdepend	77.359	1	77.359	13.539	.001	.2
	ssrelax	81.773	1	81.773	18.755	.000	.2
	ssaccept	221.755	1	221.755	44.120	.000	.4
	sscare	171.545	1	171.545	32.109	.000	.3
	sscount	69.648	1	69.648	17.060	.000	.2
	ssconsol	60.140	1	60.140	16.900	.000	.2
Error	ssdepend	279.974	49	5.714			
	ssrelax	213.639	49	4.360			
	ssaccept	246.284	49	5.026			
	sscare	261.789	49	5.343			
	sscount	200.039	49	4.082			
	ssconsol	174.369	49	3.559			
Total	ssdepend	1995.000	51				
	ssrelax	1041.000	51				
	ssaccept	1645.000	51				
	sscare	1544.000	51				
	sscount	985.000	51				
	ssconsol	724.000	51				
Corrected Total	ssdepend	357.333	50				
	ssrelax	295.412	50				
	ssaccept	468.039	50				
	sscare	433.333	50				
	sscount	269.686	50				
	ssconsol	234.510	50				

a R Squared = .216 (Adjusted R Squared = .201)
b R Squared = .277 (Adjusted R Squared = .262)
c R Squared = .474 (Adjusted R Squared = .463)
d R Squared = .396 (Adjusted R Squared = .384)
e R Squared = .258 (Adjusted R Squared = .243)
f R Squared = .256 (Adjusted R Squared = .241)

Estimated Marginal Means

group

Dependent Variable	group	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
ssdepend	1.00	7.200	.534	6.126	8.274
	2.00	4.677	.429	3.815	5.540
ssrelax	1.00	5.400	.467	4.462	6.338
	2.00	2.806	.375	2.053	3.560
ssaccept	1.00	7.400	.501	6.393	8.407
	2.00	3.129	.403	2.320	3.938
sscare	1.00	6.950	.517	5.911	7.989
	2.00	3.194	.415	2.359	4.028
sscount	1.00	5.200	.452	4.292	6.108
	2.00	2.806	.363	2.077	3.536
ssconsol	1.00	4.450	.422	3.602	5.298
	2.00	2.226	.339	1.545	2.907

General Linear Model

Notes

Output Created		09-SEP-2005 09:47:13
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	55
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		GLM satdepen satrelax sataccep satcare satcount satconso BY group /METHOD = SSTYPE(3) /INTERCEPT = INCLUDE /EMMEANS = TABLES(group) /PRINT = DESCRIPTIVE ETASQ HOMOGENEITY /CRITERIA = ALPHA(.05) /DESIGN = group .
Resources	Elapsed Time	0:00:00.02

Between-Subjects Factors

		N
group	1.00	20
	2.00	31

Descriptive Statistics

	group	Mean	Std. Deviation	N
satdepe n	1.00	1.4000	.50262	20
	2.00	1.9677	.98265	31
	Total	1.7451	.86817	51
satrelax	1.00	1.4500	.60481	20
	2.00	2.3871	1.52047	31
	Total	2.0196	1.31894	51
sataccep	1.00	1.1000	.30779	20
	2.00	1.9677	1.44877	31
	Total	1.6275	1.21591	51
satcare	1.00	1.1500	.36635	20
	2.00	2.0645	1.09348	31
	Total	1.7059	.98578	51
satcount	1.00	1.3500	.58714	20
	2.00	2.1935	1.22255	31
	Total	1.8627	1.09580	51
satconso	1.00	1.1500	.36635	20
	2.00	1.8710	1.35995	31
	Total	1.5882	1.13449	51

Box's Test of Equality of Covariance Matrices(a)

Box's M	114.947
F	4.694
df1	21
df2	6052.899
Sig.	.000

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a Design: Intercept+group

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.818	32.964(a)	6.000	44.000	.000	.818
	Wilks' Lambda	.182	32.964(a)	6.000	44.000	.000	.818
	Hotelling's Trace	4.495	32.964(a)	6.000	44.000	.000	.818
	Roy's Largest Root	4.495	32.964(a)	6.000	44.000	.000	.818
group	Pillai's Trace	.252	2.469(a)	6.000	44.000	.038	.252
	Wilks' Lambda	.748	2.469(a)	6.000	44.000	.038	.252
	Hotelling's Trace	.337	2.469(a)	6.000	44.000	.038	.252
	Roy's Largest Root	.337	2.469(a)	6.000	44.000	.038	.252

a Exact statistic

b Design: Intercept+group

Levene's Test of Equality of Error Variances(a)

	F	df1	df2	Sig.
satdepen	.206	1	49	.652
satrelax	6.716	1	49	.013
sataccep	12.040	1	49	.001
satcare	3.246	1	49	.078
satcount	2.200	1	49	.144
satconso	8.124	1	49	.006

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a Design: Intercept+group

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Et Squared
Corrected Model	satdepen	3.919(a)	1	3.919	5.686	.021	.1
	satrelax	10.676(b)	1	10.676	6.855	.012	.1
	sataccep	9.154(c)	1	9.154	6.925	.011	.1
	satcare	10.167(d)	1	10.167	12.967	.001	.2
	satcount	8.651(e)	1	8.651	8.248	.006	.1
	satconso	6.319(f)	1	6.319	5.335	.025	.0
Intercept	satdepen	137.879	1	137.879	200.075	.000	.8
	satrelax	178.989	1	178.989	114.940	.000	.7
	sataccep	114.409	1	114.409	86.556	.000	.6
	satcare	125.618	1	125.618	160.207	.000	.7
	satcount	152.651	1	152.651	145.555	.000	.7
	satconso	110.947	1	110.947	93.676	.000	.6
group	satdepen	3.919	1	3.919	5.686	.021	.1
	satrelax	10.676	1	10.676	6.855	.012	.1
	sataccep	9.154	1	9.154	6.925	.011	.1
	satcare	10.167	1	10.167	12.967	.001	.2
	satcount	8.651	1	8.651	8.248	.006	.1
	satconso	6.319	1	6.319	5.335	.025	.0
Error	satdepen	33.768	49	.689			
	satrelax	76.305	49	1.557			
	sataccep	64.768	49	1.322			
	satcare	38.421	49	.784			
	satcount	51.389	49	1.049			
	satconso	58.034	49	1.184			
Total	satdepen	193.000	51				
	satrelax	295.000	51				
	sataccep	209.000	51				
	satcare	197.000	51				
	satcount	237.000	51				
	satconso	193.000	51				
Corrected Total	satdepen	37.686	50				
	satrelax	86.980	50				
	sataccep	73.922	50				
	satcare	48.588	50				
	satcount	60.039	50				
	satconso	64.353	50				

a R Squared = .104 (Adjusted R Squared = .086)
b R Squared = .123 (Adjusted R Squared = .105)
c R Squared = .124 (Adjusted R Squared = .106)
d R Squared = .209 (Adjusted R Squared = .193)
e R Squared = .144 (Adjusted R Squared = .127)
f R Squared = .098 (Adjusted R Squared = .080)

Estimated Marginal Means

group

Dependent Variable	group	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
satdepen	1.00	1.400	.186	1.027	1.773
	2.00	1.968	.149	1.668	2.267
satrelax	1.00	1.450	.279	.889	2.011
	2.00	2.387	.224	1.937	2.837
sataccep	1.00	1.100	.257	.583	1.617
	2.00	1.968	.206	1.553	2.383
satcare	1.00	1.150	.198	.752	1.548
	2.00	2.065	.159	1.745	2.384
satcount	1.00	1.350	.229	.890	1.810
	2.00	2.194	.184	1.824	2.563
satconso	1.00	1.150	.243	.661	1.639
	2.00	1.871	.195	1.478	2.264

General Linear Model

Notes

Output Created		09-SEP-2005 09:49:16
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	55
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		GLM ptsdreesp ptsdavoid ptsdarousal BY group /METHOD = SSTYPE(3) /INTERCEPT = INCLUDE /EMMEANS = TABLES(group) /PRINT = DESCRIPTIVE ETASQ HOMOGENEITY /CRITERIA = ALPHA(.05) /DESIGN = group .
Resources	Elapsed Time	0:00:00.02

Between-Subjects Factors

		N
group	1.00	20
	2.00	31

Descriptive Statistics

	group	Mean	Std. Deviation	N
ptsdreesp	1.00	1.3500	.58714	20
	2.00	3.9032	.97826	31
	Total	2.9020	1.51334	51
ptsdavoid	1.00	.9500	.39403	20
	2.00	4.7742	.99028	31
	Total	3.2745	2.05016	51
ptsdarousal	1.00	3.1000	.96791	20
	2.00	3.6452	.79785	31
	Total	3.4314	.90011	51

Box's Test of Equality of Covariance Matrices(a)

Box's M	29.040
F	4.494
df1	6
df2	10948.583
Sig.	.000

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.
a Design: Intercept+group

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.953	317.767(a)	3.000	47.000	.000	.953
	Wilks' Lambda	.047	317.767(a)	3.000	47.000	.000	.953
	Hotelling's Trace	20.283	317.767(a)	3.000	47.000	.000	.953
	Roy's Largest Root	20.283	317.767(a)	3.000	47.000	.000	.953
group	Pillai's Trace	.871	105.515(a)	3.000	47.000	.000	.871
	Wilks' Lambda	.129	105.515(a)	3.000	47.000	.000	.871
	Hotelling's Trace	6.735	105.515(a)	3.000	47.000	.000	.871
	Roy's Largest Root	6.735	105.515(a)	3.000	47.000	.000	.871

a Exact statistic
b Design: Intercept+group

Levene's Test of Equality of Error Variances(a)

	F	df1	df2	Sig.
ptsdreesp	3.502	1	49	.067
ptsdavoid	17.812	1	49	.000
ptsdarousal	.087	1	49	.769

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a Design: Intercept+group

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Et Squared
Corrected Model	ptsdreesp	79.250(a)	1	79.250	110.133	.000	.6
	ptsdavoid	177.788(b)	1	177.788	269.131	.000	.8
	ptsdarousal	3.613(c)	1	3.613	4.798	.033	.0
Intercept	ptsdreesp	335.485	1	335.485	466.221	.000	.9
	ptsdavoid	398.337	1	398.337	602.993	.000	.9
	ptsdarousal	553.103	1	553.103	734.537	.000	.9
group	ptsdreesp	79.250	1	79.250	110.133	.000	.6
	ptsdavoid	177.788	1	177.788	269.131	.000	.8
	ptsdarousal	3.613	1	3.613	4.798	.033	.0
Error	ptsdreesp	35.260	49	.720			
	ptsdavoid	32.369	49	.661			
	ptsdarousal	36.897	49	.753			
Total	ptsdreesp	544.000	51				
	ptsdavoid	757.000	51				
	ptsdarousal	641.000	51				
Corrected Total	ptsdreesp	114.510	50				
	ptsdavoid	210.157	50				
	ptsdarousal	40.510	50				

a R Squared = .692 (Adjusted R Squared = .686)
b R Squared = .846 (Adjusted R Squared = .843)
c R Squared = .089 (Adjusted R Squared = .071)

Estimated Marginal Means

group

Dependent Variable	group	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
ptsdreesp	1.00	1.350	.190	.969	1.731
	2.00	3.903	.152	3.597	4.209
ptsdavoid	1.00	.950	.182	.585	1.315
	2.00	4.774	.146	4.481	5.068
ptsdarousal	1.00	3.100	.194	2.710	3.490
	2.00	3.645	.156	3.332	3.958

Correlations

Notes

Output Created		09-SEP-2005 09:54:19
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	55
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=ptsdreesp ptsdavoid ptsdarousal asdissociation asreexperience asavoid asarousal Concernothers dependency Pleaseothers perfection control defensive sociotropy autonomy ssdepend satdepen ssrelax satrelax ssaccept sataccep sscare satcare sscount satcount ssconsol satconso /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE .
Resources	Elapsed Time	0:00:00.01

		ptsdreesp	ptsdavoid	ptsdarousal	asdissociation	asreexperience	As avoid	asarousal	Concher
ptsdreesp	Pearson Correlation	1	.873(**)	.399(**)	.685(**)	.471(**)	.448(**)	.462(**)	.56
	Sig. (2-tailed)		.000	.004	.000	.000	.001	.001	
	N	51	51	51	51	51	51	51	
ptsdavoid	Pearson Correlation	.873(**)	1	.466(**)	.764(**)	.576(**)	.465(**)	.525(**)	.63
	Sig. (2-tailed)	.000		.001	.000	.000	.001	.000	
	N	51	51	51	51	51	51	51	
Ptsdarousal	Pearson Correlation	.399(**)	.466(**)	1	.472(**)	.539(**)	.520(**)	.445(**)	
	Sig. (2-tailed)	.004	.001		.000	.000	.000	.001	
	N	51	51	51	51	51	51	51	
Asdissociation	Pearson Correlation	.685(**)	.764(**)	.472(**)	1	.413(**)	.403(**)	.394(**)	.66
	Sig. (2-tailed)	.000	.000	.000		.003	.003	.004	
	N	51	51	51	51	51	51	51	

asreexperience	Pearson Correlation	.471(**)	.576(**)	.539(**)	.413(**)	1	.658(**)	.620(**)	.3
	Sig. (2-tailed)	.000	.000	.000	.003		.000	.000	
	N	51	51	51	51	51	51	51	
asavoid	Pearson Correlation	.448(**)	.465(**)	.520(**)	.403(**)	.658(**)	1	.529(**)	.2
	Sig. (2-tailed)	.001	.001	.000	.003	.000		.000	
	N	51	51	51	51	51	51	51	
asarousal	Pearson Correlation	.462(**)	.525(**)	.445(**)	.394(**)	.620(**)	.529(**)	1	
	Sig. (2-tailed)	.001	.000	.001	.004	.000	.000		
	N	51	51	51	51	51	51	51	
Concernothers	Pearson Correlation	.566(**)	.636(**)	.216	.664(**)	.345(*)	.295(*)	.251	
	Sig. (2-tailed)	.000	.000	.128	.000	.013	.036	.076	
	N	51	51	51	51	51	51	51	
Dependency	Pearson Correlation	.199	.206	-.011	.160	.244	.165	.114	.59
	Sig. (2-tailed)	.160	.147	.941	.262	.085	.247	.426	
	N	51	51	51	51	51	51	51	
Pleaseothers	Pearson Correlation	.557(**)	.574(**)	.335(*)	.499(**)	.295(*)	.382(**)	.284(*)	.70
	Sig. (2-tailed)	.000	.000	.016	.000	.035	.006	.044	
	N	51	51	51	51	51	51	51	
perfection	Pearson Correlation	.520(**)	.521(**)	.045	.447(**)	.190	.145	.160	.69
	Sig. (2-tailed)	.000	.000	.756	.001	.181	.311	.263	
	N	51	51	51	51	51	51	51	
control	Pearson Correlation	.390(**)	.430(**)	.237	.444(**)	.239	.254	.148	.50
	Sig. (2-tailed)	.005	.002	.093	.001	.091	.073	.299	
	N	51	51	51	51	51	51	51	
defensive	Pearson Correlation	.410(**)	.396(**)	.239	.464(**)	.174	.299(*)	.120	.3
	Sig. (2-tailed)	.003	.004	.091	.001	.221	.033	.401	
	N	51	51	51	51	51	51	51	
sociotropy	Pearson Correlation	.549(**)	.587(**)	.241	.548(**)	.351(*)	.348(*)	.268	.90
	Sig. (2-tailed)	.000	.000	.088	.000	.012	.012	.057	
	N	51	51	51	51	51	51	51	
autonomy	Pearson Correlation	.479(**)	.486(**)	.227	.512(**)	.223	.287(*)	.154	.50
	Sig. (2-tailed)	.000	.000	.110	.000	.115	.041	.280	
	N	51	51	51	51	51	51	51	
ssdepend	Pearson Correlation	-.547(**)	-.479(**)	-.213	-.420(**)	-.135	-.172	-.031	-.37
	Sig. (2-tailed)	.000	.000	.133	.002	.345	.227	.826	

	N	51	51	51	51	51	51	51	
satdepen	Pearson Correlation	.300(*)	.321(*)	.118	.226	.140	.266	.204	
	Sig. (2-tailed)	.032	.022	.410	.110	.327	.059	.152	
	N	51	51	51	51	51	51	51	
ssrelax	Pearson Correlation	-.608(**)	-.456(**)	-.230	-.431(**)	-.197	-.403(**)	-.174	-.3
	Sig. (2-tailed)	.000	.001	.105	.002	.167	.003	.221	
	N	51	51	51	51	51	51	51	
satrelax	Pearson Correlation	.272	.249	.077	.264	.178	.251	.143	
	Sig. (2-tailed)	.054	.078	.591	.061	.211	.076	.316	
	N	51	51	51	51	51	51	51	
ssaccept	Pearson Correlation	-.739(**)	-.661(**)	-.223	-.602(**)	-.195	-.280(*)	-.254	-.47
	Sig. (2-tailed)	.000	.000	.116	.000	.170	.047	.072	
	N	51	51	51	51	51	51	51	
sataccep	Pearson Correlation	.393(**)	.347(*)	.150	.354(*)	.096	.157	.333(*)	
	Sig. (2-tailed)	.004	.013	.294	.011	.505	.270	.017	
	N	51	51	51	51	51	51	51	
sscare	Pearson Correlation	-.667(**)	-.594(**)	-.360(**)	-.534(**)	-.199	-.242	-.259	-.49
	Sig. (2-tailed)	.000	.000	.010	.000	.162	.087	.066	
	N	51	51	51	51	51	51	51	
satcare	Pearson Correlation	.382(**)	.417(**)	.191	.393(**)	.228	.333(*)	.298(*)	.3
	Sig. (2-tailed)	.006	.002	.180	.004	.107	.017	.034	
	N	51	51	51	51	51	51	51	
sscount	Pearson Correlation	-.519(**)	-.413(**)	-.291(*)	-.379(**)	-.144	-.317(*)	-.212	-.42
	Sig. (2-tailed)	.000	.003	.038	.006	.312	.023	.136	
	N	51	51	51	51	51	51	51	
satcount	Pearson Correlation	.293(*)	.257	.061	.271	.192	.313(*)	.130	
	Sig. (2-tailed)	.037	.068	.670	.054	.177	.025	.363	
	N	51	51	51	51	51	51	51	
ssconsol	Pearson Correlation	-.583(**)	-.497(**)	-.309(*)	-.450(**)	-.234	-.341(*)	-.144	-.39
	Sig. (2-tailed)	.000	.000	.027	.001	.099	.014	.312	
	N	51	51	51	51	51	51	51	
satconso	Pearson Correlation	.337(*)	.308(*)	.217	.291(*)	.154	.173	.241	
	Sig. (2-tailed)	.016	.028	.127	.038	.281	.225	.088	
	N	51	51	51	51	51	51	51	

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Correlations

Notes

Output Created		09-SEP-2005 10:03:21
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	group = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	31
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=ptsdreesp ptsdavoid ptsdarousal asdissociation asreexperience asavoid asarousal Concernothers dependency Pleaseothers perfection control defensive sociotropy autonomy ssdepend satdepen ssrelax satrelax ssaccept sataccep sscare satcare sscount satcount ssconsol satconso /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE .
Resources	Elapsed Time	0:00:00.09

Correlations

		ptsdreesp	ptsdavoid	ptsdarousal	asdissociation	asreexperience	As avoid	asarousal	Concer her
ptsdreesp	Pearson Correlation	1	.562(**)	.382(*)	.296	.182	.245	.361(*)	
	Sig. (2-tailed)		.001	.034	.106	.328	.184	.046	
	N	31	31	31	31	31	31	31	
ptsdavoid	Pearson Correlation	.562(**)	1	.739(**)	.542(**)	.456(*)	.309	.558(**)	
	Sig. (2-tailed)	.001		.000	.002	.010	.091	.001	
	N	31	31	31	31	31	31	31	
Ptsdarousal	Pearson Correlation	.382(*)	.739(**)	1	.485(**)	.496(**)	.511(**)	.718(**)	
	Sig. (2-tailed)	.034	.000		.006	.005	.003	.000	
	N	31	31	31	31	31	31	31	
asdissociation	Pearson Correlation	.296	.542(**)	.485(**)	1	.099	.111	.198	.4
	Sig. (2-tailed)	.106	.002	.006		.597	.554	.286	
	N	31	31	31	31	31	31	31	

asreexperience	Pearson Correlation	.182	.456(*)	.496(**)	.099	1	.720(**)	.625(**)	
	Sig. (2-tailed)	.328	.010	.005	.597		.000	.000	
	N	31	31	31	31	31	31	31	
asavoid	Pearson Correlation	.245	.309	.511(**)	.111	.720(**)	1	.552(**)	
	Sig. (2-tailed)	.184	.091	.003	.554	.000		.001	
	N	31	31	31	31	31	31	31	
asarousal	Pearson Correlation	.361(*)	.558(**)	.718(**)	.198	.625(**)	.552(**)	1	
	Sig. (2-tailed)	.046	.001	.000	.286	.000	.001		
	N	31	31	31	31	31	31	31	
Concernothers	Pearson Correlation	.057	.156	.015	.447(*)	.004	-.126	-.102	
	Sig. (2-tailed)	.761	.401	.934	.012	.983	.499	.585	
	N	31	31	31	31	31	31	31	
Dependency	Pearson Correlation	-.089	-.004	-.190	-.103	.064	-.009	-.140	.57
	Sig. (2-tailed)	.634	.984	.305	.582	.732	.963	.453	
	N	31	31	31	31	31	31	31	
Pleaseothers	Pearson Correlation	.293	.313	.212	.284	.035	.019	.037	.54
	Sig. (2-tailed)	.110	.086	.251	.121	.853	.920	.842	
	N	31	31	31	31	31	31	31	
perfection	Pearson Correlation	.076	-.065	-.112	.199	-.033	-.144	-.044	.77
	Sig. (2-tailed)	.685	.726	.549	.282	.858	.440	.815	
	N	31	31	31	31	31	31	31	
control	Pearson Correlation	-.034	-.001	.008	.227	-.103	.071	-.019	.50
	Sig. (2-tailed)	.857	.994	.968	.220	.581	.703	.920	
	N	31	31	31	31	31	31	31	
defensive	Pearson Correlation	.220	.120	.174	.413(*)	-.013	.247	.076	
	Sig. (2-tailed)	.235	.520	.349	.021	.943	.180	.686	
	N	31	31	31	31	31	31	31	
sociotropy	Pearson Correlation	.124	.203	.035	.271	.040	-.045	-.074	.85
	Sig. (2-tailed)	.508	.272	.854	.140	.830	.810	.693	
	N	31	31	31	31	31	31	31	
autonomy	Pearson Correlation	.133	.056	.082	.378(*)	-.056	.143	.028	.53
	Sig. (2-tailed)	.475	.763	.662	.036	.765	.442	.882	
	N	31	31	31	31	31	31	31	
ssdepend	Pearson Correlation	-.312	-.151	-.059	-.267	.076	.042	.048	
	Sig. (2-tailed)	.088	.417	.752	.147	.684	.822	.799	

	N	31	31	31	31	31	31	31	
satdepen	Pearson Correlation	.066	.061	.070	.014	-.003	.150	.131	
	Sig. (2-tailed)	.724	.745	.708	.942	.988	.421	.482	
	N	31	31	31	31	31	31	31	
ssrelax	Pearson Correlation	-.463(**)	.028	-.067	-.124	.003	-.181	-.137	
	Sig. (2-tailed)	.009	.880	.721	.506	.989	.331	.462	
	N	31	31	31	31	31	31	31	
satrelax	Pearson Correlation	-.019	-.206	-.020	.040	-.014	.089	.005	
	Sig. (2-tailed)	.920	.267	.913	.831	.942	.634	.980	
	N	31	31	31	31	31	31	31	
ssaccept	Pearson Correlation	-.453(*)	-.157	-.186	-.341	.203	.057	.009	
	Sig. (2-tailed)	.010	.399	.316	.061	.274	.759	.960	
	N	31	31	31	31	31	31	31	
sataccep	Pearson Correlation	.209	.064	.134	.175	-.093	.003	.225	
	Sig. (2-tailed)	.258	.730	.472	.347	.620	.986	.224	
	N	31	31	31	31	31	31	31	
sscare	Pearson Correlation	-.345	-.111	-.304	-.298	.149	.081	-.109	
	Sig. (2-tailed)	.058	.552	.096	.104	.423	.667	.559	
	N	31	31	31	31	31	31	31	
satcare	Pearson Correlation	.006	.014	.142	.110	.015	.166	.217	
	Sig. (2-tailed)	.974	.941	.447	.554	.935	.373	.240	
	N	31	31	31	31	31	31	31	
sscount	Pearson Correlation	-.147	.163	-.003	-.062	.124	-.022	-.113	
	Sig. (2-tailed)	.430	.381	.988	.742	.508	.907	.544	
	N	31	31	31	31	31	31	31	
satcount	Pearson Correlation	-.040	-.238	-.098	.002	-.004	.172	-.004	
	Sig. (2-tailed)	.833	.197	.600	.991	.983	.355	.983	
	N	31	31	31	31	31	31	31	
ssconsol	Pearson Correlation	-.354	-.150	-.038	-.294	-.034	-.169	-.178	
	Sig. (2-tailed)	.051	.421	.839	.108	.855	.363	.339	
	N	31	31	31	31	31	31	31	
satconso	Pearson Correlation	.141	.052	.171	.107	.032	.066	.197	
	Sig. (2-tailed)	.450	.782	.356	.566	.865	.724	.288	
	N	31	31	31	31	31	31	31	

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Notes

Output Created		09-SEP-2005 10:05:58
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	group = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	31
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ptsdreesp /METHOD=ENTER sociotropy autonomy asdissociation asreexperience asavoid asarousal satdepen ssrelax satrelax ssaccept sataccep sscare satcare sscount satcount ssconsol satconso ssdepend .
Resources	Elapsed Time	0:00:00.10
	Memory Required	12540 bytes
	Additional Memory Required for Residual Plots	0 bytes

Regression

Notes

Output Created		09-SEP-2005 10:15:43
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	group = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	31
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ptsdreesp /METHOD=ENTER sociotropy autonomy asdissociation asreexperience asavoid asarousal sstotal ssattotal .
Resources	Elapsed Time	0:00:00.03
	Memory Required	6300 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	ssattotal, asreexperience, sociotropy, asdissociation, sstotal, autonomy, asarousal, asavoid(a)	.	Enter

a All requested variables entered.
b Dependent Variable: ptsdreesp

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.611(a)	.374	.146	.90394

a Predictors: (Constant), ssattotal, asreexperience, sociotropy, asdissociation, sstotal, autonomy, asarousal, asavoid

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.733	8	1.342	1.642	.170(a)
	Residual	17.976	22	.817		
	Total	28.710	30			

a Predictors: (Constant), ssattotal, asreexperience, sociotropy, asdissociation, sstotal, autonomy, asarousal, as avoid. b Dependent Variable: ptsdreesp

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.432	1.780		.804	.430
	sociotropy	.015	.012	.258	1.223	.234
	autonomy	-.008	.013	-.144	-.633	.533
	asdissociation	.023	.053	.083	.427	.673
	asreexperience	-.047	.093	-.148	-.513	.613
	asavoid	.070	.093	.202	.759	.456
	asarousal	.085	.058	.337	1.464	.157
	Sstotal	-.275	.114	-.496	-2.408	.025
	ssattotal	-.190	.180	-.209	-1.055	.303

a Dependent Variable: ptsdreesp

Regression

Notes

Output Created		09-SEP-2005 10:16:28
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	group = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	31
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ptsdreesp /METHOD=ENTER sociotropy autonomy asarousal sstotal ssattotal .
Resources	Elapsed Time	0:00:00.02
	Memory Required	5044 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	Ssattotal, sociotropy, asarousal, sstotal, autonomy(a)	.	Enter

a All requested variables entered.
b Dependent Variable: ptsdreesp

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.594(a)	.353	.223	.86206

a Predictors: (Constant), ssattotal, sociotropy, asarousal, sstotal, autonomy

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.131	5	2.026	2.727	.042(a)
	Residual	18.579	25	.743		
	Total	28.710	30			

a Predictors: (Constant), ssattotal, sociotropy, asarousal, sstotal, autonomy
b Dependent Variable: ptsdreesp

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.823	1.613		1.130	.269
	sociotropy	.014	.011	.233	1.229	.230
	autonomy	-.004	.011	-.070	-.349	.730
	asarousal	.092	.041	.367	2.247	.034
	sstotal	-.286	.104	-.517	-2.757	.011
	ssattotal	-.191	.169	-.210	-1.127	.270

a Dependent Variable: ptsdreesp

Regression

Notes

Output Created		09-SEP-2005 10:16:48
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	group = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	31
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ptsdreesp /METHOD=ENTER sociotropy asarousal sstotal ssattotal .
Resources	Elapsed Time	0:00:00.01
	Memory Required	4684 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	ssattotal, sociotropy, asarousal, sstotal(a)	.	Enter

a All requested variables entered.
b Dependent Variable: ptsdreesp

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.591(a)	.350	.250	.84737

a Predictors: (Constant), ssattotal, sociotropy, asarousal, sstotal

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.041	4	2.510	3.496	.021(a)
	Residual	18.669	26	.718		
	Total	28.710	30			

a Predictors: (Constant), ssattotal, sociotropy, asarousal, sstotal
b Dependent Variable: ptsdreesp

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.649	1.508		1.094	.284
	sociotropy	.012	.009	.199	1.244	.225
	asarousal	.092	.040	.366	2.277	.031
	Sstotal	-.277	.099	-.500	-2.806	.009
	ssattotal	-.201	.164	-.221	-1.224	.232

a Dependent Variable: ptsdreesp

Regression

Notes

Output Created		09-SEP-2005 10:17:36
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	group = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	31
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ptsdreesp /METHOD=ENTER asarousal sstotal ssattotal .
Resources	Elapsed Time	0:00:00.02
	Memory Required	4364 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	ssattotal, asarousal, sstotal(a)	.	Enter

a All requested variables entered.
b Dependent Variable: ptsdreesp

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.558(a)	.311	.234	.85593

a Predictors: (Constant), ssattotal, asarousal, sstotal

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.929	3	2.976	4.063	.017(a)
	Residual	19.781	27	.733		
	Total	28.710	30			

a Predictors: (Constant), ssattotal, asarousal, sstotal
b Dependent Variable: ptsdreesp

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.899	1.136		2.551	.017
	As arousal	.087	.041	.349	2.157	.040
	Sstotal	-.264	.099	-.476	-2.660	.013
	Ssattotal	-.174	.164	-.191	-1.059	.299

a Dependent Variable: ptsdreesp

Regression

Notes

Output Created		09-SEP-2005 10:17:52
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	group = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	31
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ptsdreesp /METHOD=ENTER asarousal sstotal .
Resources	Elapsed Time	0:00:00.02
	Memory Required	4068 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	sstotal, asarousal(a)	.	Enter

a All requested variables entered.
b Dependent Variable: ptsdreesp

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.531(a)	.282	.231	.85778

a Predictors: (Constant), sstotal, asarousal

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.107	2	4.054	5.509	.010(a)
	Residual	20.602	28	.736		
	Total	28.710	30			

a Predictors: (Constant), sstotal, asarousal
b Dependent Variable: ptsdreesp

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.525	1.083		2.333	.027
	asarousal	.082	.040	.327	2.037	.051
	sstotal	-.217	.089	-.392	-2.438	.021

a Dependent Variable: ptsdreesp

Regression

Notes

Output Created		09-SEP-2005 10:19:50
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	group = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	31
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ptsdavoid /METHOD=ENTER asdissociation asreexperience asavoid asarousal sociotropy autonomy sstotal ssattotal .
Resources	Elapsed Time	0:00:00.02
	Memory Required	6300 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	ssattotal, asreexperience, sociotropy, asdissociation, sstotal, autonomy, asarousal, asavoid(a)	.	Enter

a All requested variables entered.
b Dependent Variable: ptsdavoid

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.768(a)	.590	.442	.74001

a Predictors: (Constant), ssattotal, asreexperience, sociotropy, asdissociation, sstotal, autonomy, asarousal, asavoid

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.372	8	2.171	3.965	.005(a)
	Residual	12.047	22	.548		
	Total	29.419	30			

a Predictors: (Constant), ssattotal, asreexperience, sociotropy, asdissociation, sstotal, autonomy, asarousal, asavoid

b Dependent Variable: ptsdavoid

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.880	1.457		-.604	.552
	Asdissociation	.125	.043	.454	2.877	.009
	Asreexperience	.051	.076	.157	.672	.508
	asavoid	-.013	.076	-.038	-.175	.863
	asarousal	.109	.047	.428	2.296	.032
	sociotropy	.013	.010	.211	1.237	.229
	autonomy	-.011	.010	-.189	-1.030	.314
	Sstotal	-.037	.093	-.067	-.401	.692
	ssattotal	-.133	.148	-.145	-.902	.377

a Dependent Variable: ptsdavoid

Regression

Notes

Output Created		09-SEP-2005 10:21:13
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	group = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	31
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ptsdavoid /METHOD=ENTER asdissociation asarousal sociotropy autonomy .
Resources	Elapsed Time	0:00:00.02
	Memory Required	4684 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	Autonomy, asarousal, asdissociation, sociotropy(a)	.	Enter

a All requested variables entered.
b Dependent Variable: ptsdavoid

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.750(a)	.563	.496	.70306

a Predictors: (Constant), autonomy, asarousal, asdissociation, sociotropy

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.568	4	4.142	8.379	.000(a)
	Residual	12.852	26	.494		
	Total	29.419	30			

a Predictors: (Constant), autonomy, asarousal, asdissociation, sociotropy
b Dependent Variable: ptsdavoid

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.929	1.271		-.730	.472
	asdissociation	.131	.040	.477	3.305	.003
	asarousal	.124	.034	.488	3.653	.001
	sociotropy	.014	.009	.230	1.532	.138
	autonomy	-.014	.009	-.248	-1.604	.121

a Dependent Variable: ptsdavoid

Regression

Notes

Output Created		09-SEP-2005 10:21:39
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	group = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	31
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ptsdavoid /METHOD=ENTER asdissociation asarousal sociotropy .
Resources	Elapsed Time	0:00:00.02
	Memory Required	4364 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	sociotropy, asarousal, asdissociation(a)	.	Enter

a All requested variables entered.
b Dependent Variable: ptsdavoid

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.721(a)	.520	.467	.72323

a Predictors: (Constant), sociotropy, asarousal, asdissociation

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.297	3	5.099	9.748	.000(a)
	Residual	14.123	27	.523		
	Total	29.419	30			

a Predictors: (Constant), sociotropy, asarousal, asdissociation
b Dependent Variable: ptsdavoid

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-1.318	1.284		-1.027	.314
	asdissociation	.113	.039	.411	2.889	.008
	asarousal	.123	.035	.486	3.541	.001
	sociotropy	.008	.008	.128	.915	.369

a Dependent Variable: ptsdavoid

Regression

Notes

Output Created		09-SEP-2005 10:22:06
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	group = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	31
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ptsdavoid /METHOD=ENTER asdissociation asarousal .
Resources	Elapsed Time	0:00:00.02
	Memory Required	4068 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	asarousal, asdissociation(a)	.	Enter

a All requested variables entered.
b Dependent Variable: ptsdavoid

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.711(a)	.505	.470	.72112

a Predictors: (Constant), asarousal, asdissociation

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.859	2	7.430	14.287	.000(a)
	Residual	14.560	28	.520		
	Total	29.419	30			

a Predictors: (Constant), asarousal, asdissociation
b Dependent Variable: ptsdavoid

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.608	1.019		-.597	.556
	asdissociation	.123	.037	.449	3.311	.003
	asarousal	.119	.034	.469	3.459	.002

a Dependent Variable: ptsdavoid

Regression

Notes

Output Created		09-SEP-2005 10:23:52
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	group = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	31
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ptsdarousal /METHOD=ENTER asdissociation asreexperience asavoid asarousal sociotropy autonomy sstotal ssattotal .
Resources	Elapsed Time	0:00:00.02
	Memory Required	6300 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	ssattotal, asreexperience, sociotropy, asdissociation, sstotal, autonomy, asarousal, asavoid(a)	.	Enter

a All requested variables entered.

b Dependent Variable: ptsdarousal

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.820(a)	.672	.553	.53349

a Predictors: (Constant), ssattotal, asreexperience, sociotropy, asdissociation, sstotal, autonomy, asarousal, asavoid

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.835	8	1.604	5.637	.001(a)
	Residual	6.261	22	.285		
	Total	19.097	30			

a Predictors: (Constant), ssattotal, asreexperience, sociotropy, asdissociation, sstotal, autonomy, asarousal, asavoid
b Dependent Variable: ptsdarousal

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.258	1.051		-1.197	.244
	asdissociation	.085	.031	.385	2.727	.012
	asreexperience	-.020	.055	-.077	-.369	.715
	asavoid	.067	.055	.236	1.226	.233
	asarousal	.117	.034	.573	3.437	.002
	sociotropy	.003	.007	.060	.394	.697
	autonomy	-.006	.008	-.141	-.858	.400
	sstotal	-.015	.067	-.033	-.224	.824
	ssattotal	-.037	.106	-.050	-.346	.733

a Dependent Variable: ptsdarousal

Regression

Notes

Output Created		09-SEP-2005 10:24:55
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	group = 2 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	31
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ptsdarousal /METHOD=ENTER asdissociation asarousal .
Resources	Elapsed Time	0:00:00.02
	Memory Required	4068 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	asarousal, asdissociation(a)	.	Enter

a All requested variables entered.
b Dependent Variable: ptsdarousal

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.799(a)	.638	.612	.49668

a Predictors: (Constant), asarousal, asdissociation

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.189	2	6.095	24.705	.000(a)
	Residual	6.907	28	.247		
	Total	19.097	30			

a Predictors: (Constant), asarousal, asdissociation
b Dependent Variable: ptsdarousal

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-1.212	.702		-1.726	.095
	Asdissociation	.079	.026	.357	3.081	.005
	asarousal	.132	.024	.647	5.584	.000

a Dependent Variable: ptsdarousal

Discriminant

Notes

Output Created		09-SEP-2005 10:29:12
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	51
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing in the analysis phase.
	Cases Used	In the analysis phase, cases with no user- or system-missing values for any predictor variable are used. Cases with user-, system-missing, or out-of-range values for the grouping variable are always excluded.
Syntax		DISCRIMINANT /GROUPS=group(1 2) /VARIABLES=asdissociation asreexperience asavoid asarousal sociotropy autonomy sstotal ssattotal /ANALYSIS ALL /PRIORS EQUAL /STATISTICS=TABLE /CLASSIFY=NONMISSING POOLED .
Resources	Elapsed Time	0:00:00.03

Analysis Case Processing Summary

Unweighted Cases		N	Percent
Valid		51	100.0
Excluded	Missing or out-of-range group codes	0	.0
	At least one missing discriminating variable	0	.0
	Both missing or out-of-range group codes and at least one missing discriminating variable	0	.0
	Total	0	.0
Total		51	100.0

Group Statistics

group		Valid N (listwise)	
		Unweighted	Weighted
1.00	asdissociation	20	20.000
	asreexperience	20	20.000
	asavoid	20	20.000
	asarousal	20	20.000
	sociotropy	20	20.000
	autonomy	20	20.000
	sstotal	20	20.000
	ssattotal	20	20.000
2.00	asdissociation	31	31.000
	asreexperience	31	31.000
	asavoid	31	31.000
	asarousal	31	31.000
	sociotropy	31	31.000
	autonomy	31	31.000
	sstotal	31	31.000
	ssattotal	31	31.000
Total	asdissociation	51	51.000
	asreexperience	51	51.000
	asavoid	51	51.000
	asarousal	51	51.000
	sociotropy	51	51.000
	autonomy	51	51.000
	sstotal	51	51.000
	ssattotal	51	51.000

Analysis 1

Summary of Canonical Discriminant Functions

Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	2.016(a)	100.0	100.0	.818

a First 1 canonical discriminant functions were used in the analysis.

Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	Df	Sig.
1	.332	49.679	8	.000

Standardized Canonical Discriminant Function Coefficients

	Function 1
Asdissociation	.406
Asreexperience	.426
As avoid	-.093
As arousal	.059
Sociotropy	.398
Autonomy	.065
Sstotal	-.537
Ssattotal	.065

Structure Matrix

	Function 1
Asdissociation	.666
Sstotal	-.584
Sociotropy	.532
Autonomy	.432
Asreexperience	.397
As avoid	.339
Ssattotal	.327
As arousal	.304

Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions Variables ordered by absolute size of correlation within function.

Functions at Group Centroids

group	Function 1
1.00	-1.733
2.00	1.118

Unstandardized canonical discriminant functions evaluated at group means

Classification Statistics

Classification Processing Summary

Processed		51
Excluded	Missing or out-of-range group codes	0
	At least one missing discriminating variable	0
Used in Output		51

Prior Probabilities for Groups

group	Prior	Cases Used in Analysis Unweighted	Cases Used in Analysis Weighted
1.00	.500	20	20.000
2.00	.500	31	31.000
Total	1.000	51	51.000

Classification Results(a)

			Predicted Group Membership		
		Group	1.00	2.00	Total
Original	Count	1.00	19	1	20
		2.00	3	28	31
	%	1.00	95.0	5.0	100.0
		2.00	9.7	90.3	100.0

a 92.2% of original grouped cases correctly classified.

Discriminant

Notes

Output Created		09-SEP-2005 10:33:59
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	51
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing in the analysis phase.
	Cases Used	In the analysis phase, cases with no user- or system-missing values for any predictor variable are used. Cases with user-, system-missing, or out-of-range values for the grouping variable are always excluded.
Syntax		DISCRIMINANT /GROUPS=group(1 2) /VARIABLES=asdissociation asreexperience sociotropy sstotal /ANALYSIS ALL /PRIORS EQUAL /STATISTICS=TABLE /CLASSIFY=NONMISSING POOLED .
Resources	Elapsed Time	0:00:00.02

Analysis Case Processing Summary

Unweighted Cases		N	Percent
Valid		51	100.0
Excluded	Missing or out-of-range group codes	0	.0
	At least one missing discriminating variable	0	.0
	Both missing or out-of-range group codes and at least one missing discriminating variable	0	.0
	Total	0	.0
Total		51	100.0

Group Statistics

group		Valid N (listwise)	
		Unweighted	Weighted
1.00	asdissociation	20	20.000
	asreexperience	20	20.000
	Sociotropy	20	20.000
	Sstotal	20	20.000
2.00	asdissociation	31	31.000
	asreexperience	31	31.000
	Sociotropy	31	31.000
	Sstotal	31	31.000
Total	asdissociation	51	51.000
	asreexperience	51	51.000
	sociotropy	51	51.000
	sstotal	51	51.000

Analysis 1
Summary of Canonical Discriminant Functions

Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	1.988(a)	100.0	100.0	.816

a First 1 canonical discriminant functions were used in the analysis.

Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1	.335	51.445	4	.000

Standardized Canonical Discriminant Function Coefficients

	Function 1
Asdissociation	.422
asreexperience	.406
Sociotropy	.406
Sstotal	-.573

Structure Matrix

	Function 1
Asdissociation	.671
Sstotal	-.588
Sociotropy	.536
asreexperience	.399

Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions Variables ordered by absolute size of correlation within function.

Functions at Group Centroids

group	Function 1
1.00	-1.721
2.00	1.110

Unstandardized canonical discriminant functions evaluated at group means

Classification Statistics

Classification Processing Summary

Processed		51
Excluded	Missing or out-of-range group codes	0
	At least one missing discriminating variable	0
Used in Output		51

Prior Probabilities for Groups

group	Prior	Cases Used in Analysis Unweighted	Cases Used in Analysis Weighted
1.00	.500	20	20.000
2.00	.500	31	31.000
Total	1.000	51	51.000

Classification Results(a)

			Predicted Group Membership		
		group	1.00	2.00	Total
Original	Count	1.00	19	1	20
		2.00	3	28	31
	%	1.00	95.0	5.0	100.0
		2.00	9.7	90.3	100.0

a 92.2% of original grouped cases correctly classified.

Crosstabs

Notes

Output Created		09-SEP-2005 11:21:41
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	51
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=group BY gender /FORMAT= AVALUE TABLES /STATISTIC=CHISQ /CELLS= COUNT SRESID /COUNT ROUND CELL .
Resources	Elapsed Time	0:00:00.63
	Dimensions Requested	2
	Cells Available	116508

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
group * gender	51	100.0%	0	.0%	51	100.0%

group * gender Crosstabulation

			gender		
			1.00	2.00	Total
group	1.00	Count	7	13	20
		Std. Residual	.0	.0	
	2.00	Count	11	20	31
		Std. Residual	.0	.0	
Total		Count	18	33	51

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.001(b)	1	.972		
Continuity Correction(a)	.000	1	1.000		
Likelihood Ratio	.001	1	.972		
Fisher's Exact Test				1.000	.606
Linear-by-Linear Association	.001	1	.972		
N of Valid Cases	51				

a Computed only for a 2x2 table
b 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.06.

Crosstabs

Notes

Output Created		09-SEP-2005 11:22:22
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	51
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=group BY mstatus /FORMAT= AVALUE TABLES /STATISTIC=CHISQ /CELLS= COUNT SRESID /COUNT ROUND CELL .
Resources	Elapsed Time	0:00:00.02
	Dimensions Requested	2
	Cells Available	116508

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
group * mstatus	51	100.0%	0	.0%	51	100.0%

group * mstatus Crosstabulation

			Mstatus				
			1.00	2.00	3.00	4.00	Total
group	1.00	Count	8	3	2	7	20
		Std. Residual	-.2	-.8	1.4	.5	
	2.00	Count	14	9	0	8	31
		Std. Residual	.2	.6	-1.1	-.4	
Total		Count	22	12	2	15	51

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.542(a)	3	.209
Likelihood Ratio	5.245	3	.155
Linear-by-Linear Association	.834	1	.361
N of Valid Cases	51		

a 3 cells (37.5%) have expected count less than 5. The minimum expected count is .78.

Crosstabs

Notes

Output Created		09-SEP-2005 11:22:56
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	51
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=group BY educat /FORMAT= AVALUE TABLES /STATISTIC=CHISQ /CELLS= COUNT SRESID /COUNT ROUND CELL .
Resources	Elapsed Time	0:00:00.03
	Dimensions Requested	2
	Cells Available	116508

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
group * educat	51	100.0%	0	.0%	51	100.0%

group * educat Crosstabulation

			Educat						
			1.00	2.00	3.00	4.00	5.00	6.00	7.00
group	1.00	Count	2	4	5	2	2	1	4
		Std. Residual	-1.0	-.6	1.1	-.2	.8	-.5	1.1
	2.00	Count	8	10	3	4	1	3	2
		Std. Residual	.8	.5	-.8	.2	-.6	.4	-.9
Total		Count	10	14	8	6	3	4	6

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.305(a)	6	.294
Likelihood Ratio	7.371	6	.288
Linear-by-Linear Association	2.722	1	.099
N of Valid Cases	51		

a 11 cells (78.6%) have expected count less than 5. The minimum expected count is 1.18.

Crosstabs

Notes

Output Created		09-SEP-2005 11:37:42
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	51
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=group BY educred /FORMAT= AVALUE TABLES /STATISTIC=CHISQ /CELLS= COUNT SRESID /COUNT ROUND CELL .
Resources	Elapsed Time	0:00:00.03
	Dimensions Requested	2
	Cells Available	116508

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
group * educred	51	100.0%	0	.0%	51	100.0%

group * educred Crosstabulation

			educred			Total
			1.00	3.00	4.00	
group	1.00	Count	11	4	5	20
		Std. Residual	-.4	.3	.5	
	2.00	Count	21	5	5	31
		Std. Residual	.4	-.2	-.4	
Total		Count	32	9	10	51

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.906(a)	2	.636
Likelihood Ratio	.898	2	.638
Linear-by-Linear Association	.888	1	.346
N of Valid Cases	51		

a 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.53.

Crosstabs

Notes

Output Created		09-SEP-2005 11:38:30
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	51
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=group BY occupati /FORMAT= AVALUE TABLES /STATISTIC=CHISQ /CELLS= COUNT SRESID /COUNT ROUND CELL .
Resources	Elapsed Time	0:00:00.02
	Dimensions Requested	2
	Cells Available	116508

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
group * occupati	51	100.0%	0	.0%	51	100.0%

group * occupati Crosstabulation

			Occupati						
			1.00	2.00	3.00	4.00	5.00	6.00	8.00
group	1.00	Count	2	1	6	6	0	3	2
		Std. Residual	-1.1	-.2	-.5	1.6	-.6	.7	.3
	2.00	Count	9	2	13	2	1	2	2
		Std. Residual	.9	.1	.4	-1.3	.5	-.6	-.3
Total		Count	11	3	19	8	1	5	4

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.594(a)	6	.198
Likelihood Ratio	9.088	6	.169
Linear-by-Linear Association	3.099	1	.078
N of Valid Cases	51		

a 11 cells (78.6%) have expected count less than 5. The minimum expected count is .39.

Crosstabs

Notes

Output Created		09-SEP-2005 11:43:53
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	51
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=group BY occupred /FORMAT= AVALUE TABLES /STATISTIC=CHISQ /CELLS= COUNT SRESID /COUNT ROUND CELL .
Resources	Elapsed Time	0:00:00.01
	Dimensions Requested	2
	Cells Available	116508

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
group * occupred	51	100.0%	0	.0%	51	100.0%

group * occupred Crosstabulation

			Occupred					Total
			1.00	2.00	3.00	4.00	5.00	
group	1.00	Count	2	3	6	6	3	20
		Std. Residual	-1.1	.2	-.5	1.6	.4	
	2.00	Count	9	4	13	2	3	31
		Std. Residual	.9	-.1	.4	-1.3	-.3	
Total		Count	11	7	19	8	6	51

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.136(a)	4	.129
Likelihood Ratio	7.304	4	.121
Linear-by-Linear Association	3.675	1	.055
N of Valid Cases	51		

a 7 cells (70.0%) have expected count less than 5. The minimum expected count is 2.35.

Crosstabs

Notes

Output Created		09-SEP-2005 11:44:40
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	51
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=group BY prating /FORMAT= AVALUE TABLES /STATISTIC=CHISQ /CELLS= COUNT SRESID /COUNT ROUND CELL .
Resources	Elapsed Time	0:00:00.02
	Dimensions Requested	2
	Cells Available	116508

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
group * prating	51	100.0%	0	.0%	51	100.0%

group * prating Crosstabulation

			prating						
			1.00	2.00	3.00	4.00	5.00	6.00	7.00
Group	1.00	Count	0	1	5	6	0	1	0
		Std. Residual	-1.4	-.7	1.4	1.3	-1.4	1.0	-1.3
	2.00	Count	5	4	2	3	5	0	4
		Std. Residual	1.1	.6	-1.1	-1.1	1.1	-.8	1.0
Total		Count	5	5	7	9	5	1	4

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.308(a)	9	.002
Likelihood Ratio	32.727	9	.000
Linear-by-Linear Association	.022	1	.883
N of Valid Cases	51		

a 19 cells (95.0%) have expected count less than 5. The minimum expected count is .39.

Crosstabs

Notes

Output Created		09-SEP-2005 11:48:55
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	51
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=group BY revprating /FORMAT= AVALUE TABLES /STATISTIC=CHISQ /CELLS= COUNT SRESID /COUNT ROUND CELL .
Resources	Elapsed Time	0:00:00.01
	Dimensions Requested	2
	Cells Available	116508

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
group * revprating	51	100.0%	0	.0%	51	100.0%

group * revprating Crosstabulation

			revprating					Total
			1.00	2.00	3.00	4.00	5.00	
group	1.00	Count	0	6	6	7	1	20
		Std. Residual	-1.4	.6	1.3	-.3	-.7	
	2.00	Count	5	6	3	13	4	31
		Std. Residual	1.1	-.5	-1.1	.2	.6	
Total		Count	5	12	9	20	5	51

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.580(a)	4	.108
Likelihood Ratio	9.315	4	.054
Linear-by-Linear Association	.001	1	.974
N of Valid Cases	51		

a 6 cells (60.0%) have expected count less than 5. The minimum expected count is 1.96.

Crosstabs

Notes

Output Created		09-SEP-2005 11:53:32
Comments		
Input	Data	C:\DATA\SANDRA\Traumatic events and Recovery.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	51
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=group BY physrec emotrec /FORMAT= AVALUE TABLES /STATISTIC=CHISQ /CELLS= COUNT SRESID /COUNT ROUND CELL .
Resources	Elapsed Time	0:00:00.03
	Dimensions Requested	2
	Cells Available	116508

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
group * physrec	51	100.0%	0	.0%	51	100.0%
group * emotrec	51	100.0%	0	.0%	51	100.0%

group * physrec

Crosstab

			physrec		Total
			1.00	2.00	
group	1.00	Count	11	9	20
		Std. Residual	-.1	.1	
	2.00	Count	18	13	31
		Std. Residual	.1	-.1	
Total		Count	29	22	51

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.047(b)	1	.829		
Continuity Correction(a)	.000	1	1.000		
Likelihood Ratio	.046	1	.829		
Fisher's Exact Test				1.000	.528
Linear-by-Linear Association	.046	1	.831		
N of Valid Cases	51				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.63.

group * emotrec

Crosstab

			emotrec		Total
			1.00	2.00	
group	1.00	Count	1	19	20
		Std. Residual	1.0	-.1	
	2.00	Count	0	31	31
		Std. Residual	-.8	.1	
Total		Count	1	50	51

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.581(b)	1	.209		
Continuity Correction(a)	.050	1	.823		
Likelihood Ratio	1.903	1	.168		
Fisher's Exact Test				.392	.392
Linear-by-Linear Association	1.550	1	.213		
N of Valid Cases	51				

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is .39.