# VICARIOUS TRAUMATISATION: THE IMPACT ON POLICE OFFICIALS INVESTIGATING CRIMES AGAINST CHILDREN

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# DECLARATION

I, the undersigned, hereby declare that the work contained in this assignment is my own original work, and that I have not previously in its entirety or in part submitted it at any university for a degree.

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Date

## ABSTRACT

The purpose of the present study was to investigate the nature and incidence of vicarious traumatisation (VT) amongst members of the South African Police Service Child Protection Unit. The concept of VT purports that as a result of their empathic engagement with the traumatic material of their clients, helpers will experience disruptions in their basic schemas relating to self and others, and may also experience posttraumatic stress symptomatology in the form of intrusive images, thoughts, and avoidance phenomena. Two areas believed to be most susceptible to effects of vicarious trauma were examined, namely five psychological need areas and related cognitive schemas, and the imagery component of the memory system. The latter includes intrusion phenomena, which, in turn, give rise to a wide variety of ways of avoidance. Furthermore, the relationship between VT and a number of potentially related variables, namely the helper's a previous trauma history of abuse and the coping strategies utilised in an attempt to ameliorate the negative effects of vicarious traumatisation, were examined.

Participants included 29 members of the South African Police Service Child Protection Unit (CPU) in the Western Cape. The three control groups comprised mental health professionals, outpatient mental health clients, and chronic mental health patients. The Traumatic Stress Institute Belief Scale (Revision L)(TSIBS) was used to measure disruptions in psychological need areas and related cognitive schemas. The Impact of Event Scale (IES) was utilised to measure the intrusion and/or avoidance symptoms associated with posttraumatic stress disorder. The presence of a personal history of physical, sexual and/or emotional abuse among CPU members was determined by means of semi-structured questions. The COPE questionnaire was utilised to determine the various coping strategies used by the participants in an attempt to deal with the stressors associated with providing a service to victims/survivors of sexual abuse.

The results indicated that the CPU group exhibited significantly higher levels of disruption in their psychological need areas and related cognitive schemas than the

mental health professionals, significantly lower levels of disruption than the chronic mental health patients, and significantly higher levels of disruption than the outpatient mental health clients with regard to the following needs/schemas: safety (self and other), other-trust and other-esteem. With regard to intrusion and avoidance symptomatology, it was evident that 75.9% of the CPU members were demonstrating symptom levels corresponding to the high category of clinical concern. Relationships between a disruption of needs/schemas in general, and the incidence of intrusion and avoidance phenomena were insignificant. On the other hand, disruptions of certain specific needs/schemas (i.e., self-esteem and other-intimacy) were significantly associated with the occurrence of intrusion and/or avoidance. No significant differences between participants with and without a personal history of trauma were found. With regard to the association between the functionality of coping strategies and vicarious trauma symptomatology, a significant negative relationship was found between planning (a positive coping strategy) and a general disruption of needs/schemas, and significant positive relationships between denial and behavioural disengagement (negative coping strategies) and a general disruption of needs/schemas. These findings were consistent with previous research that showed that the use of positive coping strategies are associated with decreased levels of disruption in cognitive schemas, and that negative strategies are associated with an increased level of cognitive disruption. Relationships between positive and negative coping strategies, and intrusion and avoidance symptomatology were insignificant.

Results from the present study strongly support the notion that as a result of their interaction with sexually abused children, police officials may be negatively impacted by their work. Furthermore, the findings of this study support the usefulness of the concept of vicarious traumatisation in understanding the experience of the helper working with traumatised clients. However, due to the complex nature of the construct of vicarious traumatisation, further research into factors that may prevent, mitigate, or intensify the effects of work with trauma survivors on helpers is crucial.

## OPSOMMING

Die doel van die huidige studie was om die aard en voorkoms van vikariese (plaasvervangende) traumatisering (VT) onder lede van die Suid-Afrikaanse Polisiediens se Kinderbeskermingseenheid te ondersoek. Die konsep VT behels dat vanweë hul empatiese betrokkenheid by die traumatiese materiaal van hul kliënte, helpers ontwrigtings in hul basiese skemas met betrekking tot self en ander sal ervaar, sowel as posttraumatiese-stres-simptomalogie in die vorm van indringende beelde, gedagtes en vermydingsverskynsels sal beleef. Twee areas wat beskou word die vatbaarste is vir die effek van VT, is ondersoek. Dit is naamlik vyf sielkundige behoefteareas en hul gepaardgaande kognitiewe skemas, en die beelding komponent van die geheuesisteem. Laasgenoemde sluit indringingsverskynsels in wat, op hul beurt, weer aanleiding gee tot 'n wye verskeidenheid van maniere van vermyding. Verder is die verband tussen VT en 'n aantal moontlike verwante veranderlikes, naamlik die helper se vorige trauma geskiedenis van mishandeling en die hanteringstrategië wat aangewend word in 'n poging om die negatiewe impak van VT te versag ook ondersoek.

Deelnemers het bestaan uit 29 lede van die Suid-Afrikaanse Polisiediens se Kinderbeskermingseenheid (KBE) in die Wes-Kaap. Die drie kontrolegroepe het bestaan uit geestesgesondheidswerkers, geestesgesondheidverwante buitepasiënte, en kroniese geestesversteurde pasiënte. Die Traumatic Stress Institute Belief Scale (Revision L)(TSIBS) is gebruik om ontwrigting in sielkundige behoefteareas en hul verwante kognitiewe skemas te meet. Die Impact of Event Scale (IES) is gebruik om indringing-en vermydingsimptome wat geassosieer word met posttraumatiese-stresversteuring te meet. Die aanwesigheid van 'n persoonlike geskiedenis van fisiese, seksuele en/of emosionele mishandeling by KBE lede, is bepaal met behulp van semigestruktueerde vrae. Die COPE vraelys is gebruik om te bepaal van watter hanteringstrategieë deelnemers gebruik gemaak het in 'n poging om die stressors te hanteer wat met dienslewering aan slagoffers van seksuele mishandeling gepaardgegaan het.

Die resultate het aangetoon dat die KBE groep se vlakke van ontwrigting in hul sielkundige behoefteareas en verwante kognitiewe skemas beduidende verskil het van die drie kontrolegroepe, naamlik beduidend hoër vlakke van ontwrigting as geestesgesondheidswerkers, beduidend laer vlakke van ontwrigting as die kroniese geestesversteurde pasiënte, en beduidende hoër vlakke van ontwrigting as geestesgesondheidverwante buitepasiënte met betrekking tot die volgende behoeftes/skemas: veiligheid (self en ander), ander-vertroue en ander-agting. Met betrekking tot indringing- en vermydingsimptomatologie, het die geblyk dat 75.9% van die KBE lede simptoomvlakke gedemonstreer het wat ooreenstem met die hoë kategorie van kliniese kommer. Verbande tussen 'n ontwrigting van behoeftes/skemas in die algemeen, en die voorkoms van indringing- en vermydingsverskynsels was onbeduidend. Daarenteen was ontwrigtings van sekere spesifieke behoeftes/skemas (i.e., selfagting en ander-intimiteit) beduidende geassosieer met die voorkoms van indringing en/of vermyding. Geen beduidende verskil is tussen deelnemers met of sonder 'n persoonlike geskiedenis van trauma gevind nie. Wat betref die assosiasie tussen die funksionaliteit van die hanteringstrategië en VT simptomatologie, is 'n beduidende negatiewe verband gevind tussen beplanning ('n positiewe hanteringstrategie) en 'n algemene ontwrigting van behoeftes/skemas, en beduidende positiewe verbande tussen ontkenning en gedragsonttrekking (negatiewe hanteringstrategieë) en 'n algemene ontwrigting van behoeftes/skemas. Hierdie bevindinge stem ooreen met vorige navorsing wat aangetoon het dat die gebruik van positiewe hanteringstrategieë gepaardgaan met verlaagde vlakke van ontwrigting van kognitiewe skemas en dat negatiewe hanteringstrategieë gepaardgaan met 'n verhoogde vlak van kognitiewe ontwrigting. Verbande tussen positiewe en negatiewe hanteringstrategieë, en indringing- en vermydingsimptome was onbeduidend.

Resultate van die huidige studie verleen sterk steun vir die idee dat polisiebeamptes, as gevolg van hul interaksie met seksueel-mishandelde kinders, negatief geaffekteer kan word deur hulle werk. Verder verleen die bevindinge van hierdie studie ook steun vir die waarde van die konsep van vikariese traumatisering om die ervaring van die helper wat met getraumatiseerde kliënte werk, beter te verstaan. Hoe dit ook al sy, weens die

komplekse aard van die konsep van vikariese traumatisering is verdere navorsing oor faktore wat die effekte van werk met trauma-oorlewendes mag verhoed, verminder of vererger, van groot belang.

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# STATEMENT OF DEPARTMENT

This work is a result of a research project, which is of the same extent as that required for a master's thesis.

It is a rule of the Department of Psychology that the report of the research may take the form of an article, which is ready for submission for publication to a scientific journal.

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## 1. Introduction

Since the inclusion of posttraumatic stress disorder (PTSD) in the Diagnostic and Statistical Manual of Mental Disorders – Third Edition (American Psychiatric Association [APA], 1980), mental health professionals have shown an unprecedented interest in the psychological consequences of traumatisation. While an extensive knowledge base exists describing the psychological sequelae of traumatic experiences for victims, little attention has focused on the lasting psychological consequences for helpers exposed to the traumatic experiences of victim-clients (Matsakis, 1994). According to the description of PTSD in the DSM-IV (APA, 1994), people can be traumatised without being directly exposed to a traumatic stressor. The following extract highlights this fact:

> The essential feature of posttraumatic stress disorder is the development of characteristic symptoms following exposure to an extreme traumatic stressor involving direct personal experience of an event that involves threatened death, actual or threatened serious injury or other threats to one's physical integrity; or witnessing an event that involves the death, injury or a threat to the physical integrity of another person; or *learning about unexpected or violent death, serious injury, or threat of death or injury experienced by a family member or other close associate* (Criterion A1)(p. 424)

However, a gradual shift has taken place and consistently more literature has been generated focussing on the impact on individuals rendering services to directly traumatised victims. What has emerged from the literature is not whether indirect trauma can happen or not; rather, the controversy appears to centre on

nomenclature. In view of the conceptual conundrum, it is essential that clarity be obtained regarding the terminology currently used to describe the impact of exposure to other's traumatic experiences by virtue of the role of helper.

## 2. Conceptual definitions

### 2.1 Secondary traumatic stress/Compassion fatigue

The term secondary victimisation was originally used by Figley (1983) to describe the psychological impact on persons who come into close contact with survivors. He has subsequently revised the term, referring to it as "compassion fatigue" (CF) and presently uses this description interchangeably with "secondary traumatic stress" (STS) (Stamm, 1997).

Figley (1995) defined STS/CF as "the natural consequent behaviours and emotions resulting from knowing about a traumatising event experienced by a significant other - the stress resulting from helping or wanting to help a traumatised or suffering person" (p.7). Figley (1995) is of the opinion that there is an essential difference between the pattern of response during and following a traumatic event, for people exposed to primary stressors (i.e., directly traumatised) as opposed to those exposed to secondary stressors. He therefore conceptualises STS/CF as a syndrome of symptoms similar to posttraumatic stress disorder (PTSD). The cause of the symptoms differs however. In the case of PTSD, the symptoms are caused by a direct experience, whereas, in the case of STS, learning of the traumatisation of another person causes the symptoms.

### 2.2 Burnout

The term "burnout", which was introduced by Freudenberger (1974) and further expanded upon by Maslach (1976), has been widely used to describe problems faced by individuals with occupational stress. Based on data obtained from two

of the most widely used measures of burnout, namely the Maslach Burnout Inventory (Maslach & Jackson, 1981) and the Burnout Measure (Pines & Aronson, 1988), a collection of symptoms associated with emotional exhaustion appears to be the key factor. Following a comprehensive review of the empirical literature on the symptoms of burnout, Kahill (1988) elucidated a number of associated symptoms. These include the following: (1) physical symptoms (e.g. fatigue and sleep difficulties), (2) behavioural symptoms (e.g. aggression, cynicism and substance abuse), (3) work-related symptoms (e.g. resigning from the job, poor work performance and absenteeism), and (4) interpersonal symptoms (e.g. dehumanising clients, inability to concentrate/focus and withdrawal form clients/co-workers). Factors which appear to exacerbate burnout symptoms include client problems that are perceived to be beyond the capacity of the helper, as well as the struggle by such helpers to find a balance between trying to promote the well-being of their clients, and adhering to the policies and structures of organisations that are inclined to stifle empowerment, well-being and work-related satisfaction (Barr, 1984).

**2.3 Countertransference**

The term countertransference, which was first used by Freud in his 1910 paper "The Future Prospects of Psychoanalytic Therapy" (cited in Strachey, 1959), can be simplistically defined as an emotional reaction to a client by the helper. Despite the ongoing debate about the precise definition and the components of countertransference, most definitions of countertransference include the following aspects: (1) the helper's affective response to his client, (2) the helper's responses to his client, based upon his own history, (3) the helper's defences against his own affects or intrapsychic conflicts aroused by the client's material,

(4) any responses that impede the helper's ability in assisting the client, and (5) the helper's unconscious responses to the client (Figley, 1995).

### 2.4 Vicarious traumatisation

Vicarious traumatisation (VT), the term that is the focus of the present study, was first described by McCann and Pearlman (1990b) as a process through which the inner experience of the therapist is negatively transformed through empathic engagement with the clients' trauma material. Despite their initial emphasis on trauma therapists, the authors state that anyone who engages empathically with trauma survivors, for example journalists, police officials, childcare workers and researchers, can be affected by vicarious traumatisation.

According to Pearlman (1994) helpers will experience a wide range of responses and inner changes as a result of the cumulative effects of their work. These changes can be categorised as general and specific. General changes, some of which parallel PTSD symptoms, include anxiety, depression, numbing, avoidance of reminders of the traumatic event, and intrusive imagery manifesting in the form of nightmares or "flashbacks", and a sense of reliving another's experience. Helpers may also find themselves feeling increasingly sad, cynical and sensitive to violence, for example they may find that they are unable to watch the news on television or attend violent movies. Specific changes occur in the areas delineated by Constructivist Self Development Theory (CSDT), which provides the context for the construct vicarious traumatisation (Pearlman & Saakvitne, 1995b). CSDT, which will be elaborated on in greater detail in a later section of the study, highlights the progressive development of a sense of self and world view in reaction to life experiences. According to this theory, trauma disrupts the self and the individual's world view in particular ways. Similarly VT can affect

these aspects of the helper's self and world view as a result of their empathic engagement with clients' trauma material.

Finally it is important to differentiate VT from the three terms already discussed. VT differs from STS/CF in focus and context. STS/CF is based on a diagnostic conceptualisation of PTSD and focuses more on observable symptoms than on context and etiology (Pearlman & Saakvitne, 1995b). In contrast, the concept of VT adheres to a particular developmental and constructivist model of personality where relationship, meaning and adaptation form an integral part of human experience. Observable symptoms are thus placed within the larger context of human adaptation and quest for meaning. (Pearlman & Saakvitne, 1995a). A common denominator between VT and STS/CF is that they always arise as a result of exposure to a client's traumatic material, in contrast to countertransference and burnout that can occur outside the context of exposure to traumatic material (Stamm, 1997).

Burnout is related to occupations identified as high in stress with low rewards and in which workers' minimal requirements for occupation-related satisfaction are unattainable. Burnout is thus related to a specific situation but does not include the interaction between the individual and the situation, an interface that is fundamental in VT (Pearlman & Saakvitne, 1995b).

While VT and countertransference are separate concepts and experiences, they are not mutually exclusive (Saakvitne, 1996). VT differs from countertransference in that it is not specific to one client or helping relationship; rather it takes place over time, across clients and helping relationships. The effects of VT are thus experienced beyond a particular helping relationship, that is, in other helping relationships and in the helper's personal and professional life. VT is permanently

transformative, while countertransference is temporally and transiently linked to a particular period, event, or issue in the helping relationship or in the helper's inner or external life as it interacts with the helping process (Pearlman & Saakvitne, 1995a).

### 3. Social relevance of the study

Violent crime and trauma are normative within many societies. More specifically, many commentators have come to refer to South Africa as a "culture of violence", that is, a society which sanctions and accepts violence as an acceptable and legitimate means to resolve problems and achieve goals (Hamber & Lewis, 1997). Statistics obtained from the South African Police Service (SAPS) for the year 2000 and the first quarter of 2001 report 19 735 murders, 49 989 cases of rape and attempted rape, 6 414 cases of indecent assault; and 2504 cases of cruelty and ill treatment of children (excluding sexual offences, assault and murder)(Crime Information Analysis Centre: CIAC, 2001). The SAPS Child protection Unit indicated that 37 500 cases of child abuse and neglect were reported during the period 1997/1998. According to Childline (2001), this figure represents only the tip of the iceberg due to the conspiracy of silence that surrounds violence against children. The main focus of the present study is the investigation of the impact of vicarious traumatisation on police officials investigating crimes against children.

Any involvement with traumatised individuals undoubtedly has emotional/psychological consequences for the helper. Dyregrov and Mitchell (1992) and Figley (1995) purport, however, that working with traumatised children results in even greater distress amongst helpers due to the fact that these interactions potentiate motivating factors in the helper's personality, break down

natural defences and lead to strong identification with the victims. Intrusive images also appear to be more easily formed in those who work with traumatised children (Mitchell, 1984). These are all factors which, according to Pearlman and Saakvitne (1995a), contribute significantly to the experience of vicarious traumatisation. In a study conducted by Oliveri and Waterman (1993) helpers reported severe distress and PTSD symptoms secondary to their helping relationship with abused children. A study surveying the impact of working with sexual assault victims on police officers found that PTSD symptoms were significantly more prevalent among police officers dealing with rape victims and that the investigation of child abuse cases showed a trend toward a significant association with PTSD symptoms (Martin, McKean & Veltkamp, 1986).

Despite the enormous amount of cases of child abuse being investigated by the SAPS Child Protection Unit, combined with the horrific nature of many of these cases, no South African data focussing on the impact on police officials investigating crimes against children could be found. More specifically, no South African research dealing specifically with the construct of vicarious traumatisation appears to have been published.

In light of the excessive crime rate in this country and more specifically the rate of child abuse – the paucity of research focussing on the psychological/emotional consequences for helpers is disturbing. This dearth in research is not only detrimental to those providing services to victims but to victims as well. Due to the (unaddressed) consequences of their work, many helpers are abandoning their respective professions, resulting in an even greater void in an already depleted system.

## 4. SAPS Child Protection Unit (CPU)

The SAPS CPU is a specialised investigative division of the South African Police Service. The units are involved exclusively with the investigation of crimes against children. These crimes include rape and indecent sexual assault of children under the age of 14 years, however in cases where the victims are intellectually impaired, the cut-off age for the investigation of cases is 17 years. Although the units will investigate severe cases of physical abuse (assault with the intent to inflict grievous bodily harm), their main investigative focus, however, centres on sexual crimes committed against children. CPU's are situated in a number of major centres around South Africa. The units that participated in the present study, namely Goodwood and Mitchells Plain, are the only two units serving the entire Western Cape province.

## 5. General review of vicarious traumatisation research

Literature pertaining to the posttraumatic response patterns of directly traumatised victims has been extensively researched and is well documented. One particular historical/political event that provided renewed impetus for the study of victims' posttraumatic reactions was the Vietnam war. Despite not being the primary focus of her study, Sarah Haley's 1974 paper entitled "When the patient reports atrocities: Specific treatment considerations for the Vietnam veteran" described quite clearly the therapist's emotional reaction on hearing clients' Vietnam war atrocities. Retrospectively, this paper can be viewed as one of the first studies that indirectly recognised the potential for the helper to become secondarily traumatised (Stamm, 1997).

Figley (1983) noted that the number of victims of violent crimes, accidents and traumatic events are grossly underestimated in reports since only those directly

affected are usually included. Family, friends and helpers are often excluded. Addressing this issue, Figley (1983, 1989) published a number of works highlighting the impact of secondary traumatic stress on the families and friends of primary victims, paving the way for the shift in focus to the secondary victim and secondary traumatic stress reactions.

The academic acknowledgment of the existence and impact of secondary traumatic stress during the 1980's provided the momentum for researchers, specifically those within the field of disaster work, to publish extensively on the psychological sequelae of disaster work on emergency services personnel. The most prominent early works included those by Hartsough and Meyers (1985) and Durham, McCammon and Allison (1985). Presently the area dealing with emergency services provision is undoubtedly the best documented segment of the secondary traumatic stress literature.

Other professions (i.e., besides the emergency services), although still lagging behind, show potential of developing an expanded awareness of the problem. There is, for example, an investigation on the impact of the trial process on jurors (Hafmeister, 1993). This study found elevated levels of stress in jurors serving on trials where the evidence was particularly graphic and gruesome. McCarrol, Blank and Hill (1995) examined the psychological impact on museum workers exposed to potentially disturbing personal artefacts of Holocaust victims as well as other horrific reminders of the Holocaust. In another study focussing on subway train drivers, Theorell, Leymann, Jodko, Konarski and Norbeck (1994) found that drivers who had experienced a "person under train" incident had more sick days, increased sleep disturbances and reported a deterioration of their psychosocial work environment. The impact of exposure due to research and

training about trauma was also examined by Picket, Brennan, Greenberg, Licht and Worrell (1994) and McCammom (1995), respectively. These authors describe how crisis debriefing can be utilised to mitigate the effects of secondary PTSD amongst interviewers who collect data from victims following traumatic events, as well as specific teaching techniques to address the effects of exposing students to traumatic material during teaching. The potential deleterious effects of secondary traumatisation was also acknowledged by the Truth and Reconciliation Commission (TRC), a process implemented by the post-apartheid South African government to allow victims of political violence to tell their stories. Several psychologists were appointed to assist TRC staff members in dealing with intense and extended exposure to traumatic material – their aim being to prevent secondary traumatisation of personnel (De Ridder, 1997).

In terms of vicarious traumatisation, McCann and Pearlman (1990b) published an article suggesting that hearing traumatic client material will alter a significant portion of the helper's cognitive world. Furthermore, the authors are of the opinion that all helper's working with clients who have survived traumatic experiences, will experience lasting alterations in their cognitive schemas, impacting significantly on the helper's feelings, relationships, and life. That is, through exposure to clients' graphic accounts of traumatic experiences and to the realities of people's intentional cruelty to one another, helpers are vulnerable by virtue of their empathic openness, to the emotional and spiritual effects of vicarious traumatisation, as well as other posttraumatic stress symptomatology (Pearlman & Saakvitne, 1995a).

Subsequently several authors have published on the construct of vicarious traumatisation. Schauben and Frazier (1995) examined the effects on female

counsellors working with sexual violence survivors. The results showed that working with survivors was particularly related to disruptions in beliefs about the goodness of other people (like other-esteem). Counsellors with higher sexual abuse caseloads also reported more psychological symptoms such as nightmares, heightened fear and increased feelings of vulnerability. In a study conducted by Cunningham (1996) counsellors working with sexual abuse cases, as opposed to those working with cancer patients, reported more disruptions in several cognitive schemas, including the safety schemas, other-trust and other-esteem. Johnson and Hunter (1997) also reported a disruption in intimacy and control schemas amongst workers employed by the New South Wales Sexual Assault Services. A reflexive narrative study conducted by Arvay (1998), in which she investigated the meanings related to experiences of struggling with vicarious traumatisation among trauma counsellors, generated a number of salient aspects, namely struggles with changing beliefs, physical illness, and social support. In addition to investigating the impact of trauma work on the helper, Pearlman and Mac Ian (1995) and Follette, Polusny, and Milbeck (1994), also attempted to identify independent variables that might predict vicarious traumatisation. The most significant of these variables were (1) time period working with trauma survivors, (2) percentage of trauma survivors in the helper's caseload, and (3) the use of personal therapy to address the effects of trauma work. Undoubtedly one of the most significant findings by both groups of authors was that helpers reporting a personal history of sexual or physical abuse during childhood, had significantly higher levels of trauma specific symptoms than did helpers not reporting these forms of childhood trauma. Schauben and Frazier's (1995) study did however not support these findings.

In order to fully comprehend the construct of vicarious traumatisation (such as, its nature, areas of impact and effects), a thorough understanding of the underlying theory is of vital importance. The section that follows will thus provide a detailed description of a theoretical basis underlying vicarious traumatisation.

## 6. Constructivist Self Development Theory (CSDT)

The construct of vicarious trauma is based in constructivist self development theory (CSDT) (McCann & Pearlman, 1990b; Pearlman & Saakvitne, 1995a). CSDT is an integrative personality theory that describes the impact of traumatic life experiences on the development of the self. Furthermore, it provides the framework for understanding the impact of trauma work on the helper.

By integrating constructs from psychoanalytic and social learning theories, CSDT conceptualises personality development as an interactive process between core self-capacities (related to early development, secure attachments and ego resources) and constructed beliefs and schemas (related to cumulative experiences and the attribution of meaning to those experiences) that shape perception and experience. Therefore it is a constructivist theory of personality development (Saakvitne, Tennen & Affleck, 1998).

The theory integrates psychoanalytic theory with cognitive theories and draws upon interpersonal psychiatry, self-psychology and object relations. These theories are synthesised with constructivist thinking, social learning theory and cognitive developmental theory (Pearlman & Saakvitne, 1995a).

The underlying constructivist foundation is founded in the idea that humans actively create and construe their personal realities. Each individual thus creates his own representational model of the world. This experiential foundation of

structural relations in turn becomes a framework that the individual uses to order and assign meaning to new experiences. Constructivism thus proposes that rather than being a template through which continuous experience is filtered, the representational model plays an active role in creating and understanding new experience and in doing so, determining what the individual will perceive as "reality" (Mahoney & Lyddon, 1988).

According to McCann and Pearlman (1991) the self is a hypothetical construct that is used to describe the foundation of the entire psychological experience of the person. The self is the epicenter of the individual's identity and inner life. The self is comprised of basic capacities which function to maintain an inner sense of identity and positive self-esteem, namely ego resources which assist in the regulation and enhancement of interactions with the world outside oneself, psychological needs, which provide the motivation for behaviour, and cognitive schemas, which are both conscious and unconscious beliefs, assumptions and expectations through which individuals interpret their experience (McCann & Pearlman, 1990b).

As implied by its name, CSDT emphasises a developmental perspective. One of the central premises it that the person's early development is central to his current way of experiencing and interacting with self and others (Pearlman & Saakvitne, 1995a). Furthermore, within the framework of constructivism, the developmental approach postulates that experiences of trauma are reinterpreted and reconstructed during subsequent developmental stages (Saakvitne, et al., 1998).

According to the model of CSDT, trauma impacts and disrupts five areas of the self. These include (1) frame of reference (one's overarching way of viewing self

and world), (2) self capacities (inner ability to maintain a consistent and coherent sense of self and self-worth over time and situations), (3) ego resources (inner faculties enabling the individual to meet psychological needs and navigate interpersonal relations), (4) psychological needs and related cognitive schemas, and (5) the memory system (Pearlman, 1998). In a parallel process to the trauma victims they engage with, helpers may have these specific areas altered and in this way experience vicarious traumatisation (Courtois, 1993).

Despite the fact that the individual's unique adaptation to trauma can be understood as a complex interplay between these five factors, the present study will focus mainly on the psychological needs and their related cognitive schemas and the memory system. The focus on psychological needs and related cognitive schemas is based on the premise that each person's unique experience of trauma will be largely determined by his or her psychological needs and related schemas about self and others (Pearlman & Saakvitne, 1995a). The focus on the memory system is based on the findings of Brett and Ostroff (1985) and Van der Kolk (1989), who assert that intrusive imagery is a hallmark of post-trauma adaptation. VT often results in helpers experiencing intrusions of their clients' traumatic material. Furthermore, Pearlman and Saakvitne (1995a) state that the images most likely to stay with, distress and intrude upon the helper, are those that are in some way related to salient psychological needs.

### 6.1 Psychological needs and related cognitive schemas

A fundamental premise of CSDT is that trauma disrupts schemas or beliefs about self and the world (McCann & Pearlman, 1993). The construct schema forms the foundation of the social cognition theories, a construct that is largely derived from Piaget's cognitive developmental theory (1971). According to this theory,

individuals develop complex cognitive structures over their life span. These cognitive structures consist of schemas, which according to Piaget are basic structures of action that form a pattern for experience. In more recent years, schemas have been broadly defined as assumptions, beliefs and expectations about self and world that enable individuals to organise their life experiences in ways that help them comprehend their world (McCann & Pearlman, 1990b).

Individuals develop schemas related to all their life experiences. However, CSDT focuses on those schemas that relate to psychological need areas, which motivate behaviour and shape relationships. Furthermore, they view these schemas as the cognitive manifestations of psychological needs. An extensive review of the trauma literature (McCann, Sakheim & Abrahamson, 1988), as well as clinical observations and continuing research on a measure of psychological needs and cognitive schemas (McCann, Pearlman, Sakheim, & Abrahamson, 1988), have identified five needs that appear to be most sensitive to psychological trauma, namely (1) safety, (2) trust, (3) esteem, (4) intimacy, and (5) control. According to Pearlman and Saakvitne (1995a) the same five psychological needs that are sensitive to disruption by trauma are susceptible to the effects of vicarious trauma. It is important to note, and should be emphasised, that each of these needs can be manifested both in relation to self and in relation to others.

### 6.1.1 Safety

Security, or the need to feel safe and reasonably invulnerable to harm, corresponds to safety schemas (McCann & Pearlman, 1990a). While McCann, Pearlman, et al. (1988) agree that the idea that one is invulnerable to harm can have dangerous implications, they are of the opinion that the belief that one is

incapable of protecting oneself from future harm, is far more problematic. Disrupted safety schemas can give rise to a response pattern associated with intrusive thoughts about danger, irritability, startle responses, psycho-physiological arousal or intense fear of future victimisation (McCann, Pearlman, et al., 1988). In a study conducted by Pearlman and Mac Ian (1995), trauma therapists with safety disruptions also reported talking to themselves self-critically, rejecting their partner's sexual advances, being told by others that they are too self-critical and not trusting their instincts with clients.

While safety in relation to the self refers mainly to one's beliefs about one's own self-protective characteristics, safety in relation to others refers specifically to the individual's beliefs or expectations about the likelihood of being harmed by others. Negative other-safety schemas are likely to be associated with avoidant or phobic responses or social withdrawal (McCann, Sakheim, et al., 1988).

A number of theorists apart from the proponents of CSDT, such as Barlow, Janoff-Bulman, and Beck have forwarded arguments that could possibly further explain the role of certain factors in the disruption of safety schemas. David Barlow (1988) highlights the role of a "sense of uncontrollability" and "unpredictability" in the development of anxiety disorders (including PTSD). Janoff-Bulman (1992) also emphasised the impact that traumatic experiences may have on the individual's assumptions regarding the illusion of invulnerability. He is of the opinion that when a person is exposed to an extremely traumatic event, there is a breakdown of this illusion and an increase of intense feelings of vulnerability and fear that something similar to what has been encountered, will happen to oneself or to one's loved ones. The concept of vulnerability also plays a central role in Beck's theory pertaining to the development and maintenance of

anxiety disorders (Beck, Emery, & Greenberg, 1985). This theory posits that when individuals enter into a vulnerability mode, danger schemata are activated, which in turn result in hypersensitivity to any indication of danger. It is quite possible that these variables play a mediating role in the disruption of safety schemas, however these factors were not investigated in the present study.

### 6.1.2 Trust

The central need for support from others and the expectancy that other people can be trusted and relied upon to fulfill these needs are crucial in the personal development of the individual, as well as the maintenance of mental health and healthy relationships with others (McCann & Pearlman, 1990b). When self-trust is disrupted, individuals feel less able to be independent. They no longer trust their own perceptions of other people, social situations or their own feelings. Furthermore, the loss of trust in one's judgment or ability to judge others decreases one's safety, resulting in the individual trusting indiscriminately, which in turn can have disastrous consequences. Restricted access to feelings deprives the individual of information to assess situations and people and thus further undermines the process of forming appropriate judgments (Pearlman & Saakvitne, 1995a). Trust in relation to the self is thus essential in making constructive life choices and serves an important self-protective function. Individuals with disrupted schemas related to self-trust often experience anxiety, confusion, over-caution, or paralysis in the face of life decisions (McCann, Pearlman, et al., 1988).

The ability to trust others is essential in the formation of meaningful interpersonal relationships. Helpers who work with victims are continuously exposed to the many cruel ways that people betray, deceive, or violate the trust of fellow human

beings. Consequently, through the process of vicarious traumatisation, many helpers experience disruptions in their other-trust schemas. Such disruptions often leave the individual with a pervasive sense of suspicion of the motives of others, disillusionment and disappointment in others, intense fear of betrayal or abandonment and anger and rage. Such an emotional scenario often results in the individual rejecting all external resources and assistance, ultimately resulting in an isolated existence. Relationships with intimate partners, friends and children often become increasingly difficult as the individual perceives these loved ones with less innocence and trust than may be warranted (Pearlman & Saakvitne, 1995a).

### 6.1.3 Esteem

The belief in one's own worth or value has been widely recognised as a fundamental aspect of psychological well-being (Maslow, 1970). According to Pearlman and Saakvitne (1995a) it is not uncommon for helpers with a disrupted esteem schema to suffer from a more generalised negative sense of self-esteem. Due to the nature of their work, helpers often feel helpless in the face of an unremitting stream of victims of the uncaring, cruel, or malicious intentions and acts of other human beings. Such scenarios often result in helpers feeling that if they can no longer help other people, they are essentially useless (Pearlman & Saakvitne, 1995a). Such beliefs are often associated with feelings of depression, worthlessness, self-loathing, futility and despair – suicide being the ultimate destruction of the severely disrupted self-esteem.

Impairments in esteem for others are highly likely to occur as a result of working with survivors of sexual or other abuse (Pearlman & Mac Ian, 1995). Helpers who are constantly faced with stories revolving around the malicious nature of human

beings often experience a devaluation of people and view them as basically uncaring, evil, indifferent, or more generally, perceive humanity as a whole as iniquitous and malevolent (McCann, Sakheim, et al., 1988). According to McCann, Pearlman, et al. (1988) individuals with negative schemata related to other-esteem may be unable to experience others as positive, good or kind; rather, their view of others is pervaded with anger, contempt, bitterness and cynicism. This loss of self-esteem and esteem for others undermines the helper's ability to connect with self and others and often renders him/her withdrawn, isolated and alienated (Pearlman & Saakvitne, 1995a).

### 6.1.4 Intimacy

McCann, Sakheim, et al. (1988) argue that one of the most important, but often most neglected aspects of self-schemas, is the person's expectation of being connected or intimately related to his/her own self. Positive schemas in the area of self-intimacy may include the belief that one will enjoy being alone, that one can be a friend to oneself, and that one can connect with others in a meaningful and purposeful way (McCann & Pearlman, 1990a). According to Pearlman and Saakvitne (1995a) the awareness of all-encompassing human cruelty that results from work with trauma survivors, can result in emotional numbing, which in turn, obstructs feelings of intimacy with oneself and with others. When feelings are blocked it results in a loss of self-intimacy, which in turn precludes the individual from enjoying his/her usual individual pursuits and creativity. Persons who experience negative self-intimacy schemas may experience an inability to comfort and soothe the self, a fear of being alone or the experience of inner emptiness or numbing. An inability on the part of individual to comfort or soothe the self can result in periods of disintegrative anxiety or panic when distressing emotions or memories surface when they are alone. In an attempt to compensate for a lack of

self-soothing, individuals may turn to external sources of comfort, such as alcohol, drugs and medications (McCann, Sakheim, et al., 1988).

The longing for intimacy, connection and closeness with others is a fundamental assumption of most models of psychological well-being (Erikson, 1963; Maslow, 1971). However, this capacity for an intimate connection to other people is a fragile one that can easily be dented or destroyed. Disruptions in the other-intimacy schema may result in and overwhelming fear about loving and experiencing intimacy, even with others who genuinely care. Emotional distance from family and friends and a restriction in the number, range, and intensity of friendships, are also not an uncommon phenomenon (Pearlman & Saakvitne, 1995a). Ultimately the individual is trapped in a world where bonds of human identification are severed, and all that remains is a deep sense of meaninglessness and futility (McCann, Sakheim, et al., 1988).

### 6.1.5 Control

A lack of control and the resulting feelings of powerlessness represent central issues for trauma survivors (McCann, Sakheim, et al., 1988). As a result of their interaction with trauma survivors, helpers can similarly experience a decreased sense of self-control, which can impede their ability to adequately control their behaviour, thoughts and feelings. Helpers with a disrupted sense of self-control may question their ability to take charge of their lives, to direct their futures, to express their feelings and to function freely in the world (Pearlman & Saakvitne, 1995a). According to McCann, Pearlman, et al. (1988) disrupted self-control schemas can manifest psychologically as a sense of futility, lack of assertiveness, passivity and depression. This response pattern closely resembles what Seligman (1975) conceptualised as learned helplessness. This theory postulates

that the individual's first reaction to noxious stimuli is an attempt to regain control. However, if future events are perceived as uncontrollable, people may give up actively trying to assert control (McCann, Pearlman, et al., 1988). In the extreme, individuals may attempt to confirm the accuracy of these disrupted self-control schemas by means of self-destructive life patterns or through suicide.

Work with survivors of trauma may also result in helpers experiencing disruptions in the realm of other-control. Such disruptions are often manifested in two alternative ways. The first manifestation often involves attempts to exercise greater control over others, such as taking greater control in personal relationships in an attempt to compensate for a lack of ability to control events in the lives of survivor-clients. The impossible nature of such efforts often results in the narrowing of the helper's world in an attempt to function in a world that can be controlled. This solution more often than not leads to helpers severely confining their lives and their opportunities due to fear (Pearlman & Saakvitne, 1995a). The second manifestation centers on the surrender of control in situations where control is appropriate and possible. The afflicted individual relinquishes any ability to lead or influence others as he internalises the helplessness of his survivor-clients (McCann, Sakheim, et al., 1988). According to McCann, Pearlman, et al. (1988), if this response pattern becomes entrenched, individuals becomes increasingly vulnerable to future harm and may find others consistently taking advantage of them, further validating their schemas.

### 6.2 Memory

According to Paivio's (1986) dual coding model of memory, individuals encode life experiences into verbal and imagery representational systems of memory. All language-related aspects of memory are encoded in the verbal representational

system. He states further that since the visual system is the most dominant symbolic system for most sighted individuals, the majority of persons will experience imagery as the strongest component of symbolic memory. The imagery system thus contains the nonverbal representations of experience. Furthermore, emotion is linked to the imagery system of memory since it is by definition nonverbal.

CSDT recognises that memory and perception are complex and multimodal and that experience is processed and recalled through several modalities, including cognitive (narrative), visual, affective (emotional), somatic, sensory, and interpersonal (behavioural) (Saakvitne & Pearlman, 1996). Unlike complete (nonfragmented) memory, which is encoded along all of the above-mentioned dimensions, traumatic memory commonly involves the fragmentation or dissociation of aspects of the individual's complex experience. Such disruptions in memory are considered a hallmark of post trauma adaptation (Brett & Ostroff, 1985; Van der Kolk, 1989).

According to Paivio (1986) the imagery system of memory is most likely to be altered in vicarious traumatisation. Similar to the victims of trauma, helpers may experience the traumatic imagery of their clients returning as fragments, without context or meaning. These imagery fragments may manifest in the form of flashbacks, dreams, or intrusive thoughts and may be triggered by previously neutral stimuli that have become associated with the client's traumatic memories (Horowitz, 1976).

Powerful affective states are often associated with disruptions in the imagery system of memory and as a result helpers may report various uncomfortable emotions resulting from their work with victims, for example sadness, anxiety or

anger (Bower, 1981; Paivio, 1986). When helpers are unable to process their emotional reactions, they may experience denial or emotional numbing. The latter may occur when helpers are exposed to traumatic imagery that is too overwhelming, emotionally or cognitively, to integrate. According to McCann and Pearlman (1990b) the feelings associated with imagery may be too overwhelming due to the fact that the helper's own capacities for affect regulation are overtaxed, or because the traumatic experiences are too discrepant with the helper's own meaning systems or schemas. Consequently individuals may employ avoidance responses such as denial of the meaning and consequences of the event, emotional numbing, as well as strategies to avoid conversations, activities, people, places or other reminders associated with the traumatic experience (Horowitz, Wilner, & Alvarez, 1979).

**7. Intrusion and avoidance**

Intrusive recollections of aspects of a traumatic event are at the core of posttraumatic stress disorder. These intrusive recollections are entirely spontaneous, relatively uncontrollable and often characterised by intense affect and sensory elements that are experienced as happening in the present (Reynolds & Brewin, 1998). Intrusive recollections can take the form of visual recollections (images), or other sensory impressions such as noises, smells, tactile sensations, thoughts, flashbacks, or dreams (Steil & Ehlers, 2000). In a study conducted by Wenninger and Ehlers (cited in Ehlers and Steil, 1995) it was found that the most common intrusive recollections amongst a group of adult survivors of sexual abuse and a group of road traffic accident survivors, were visual in nature (resembling 'film clips' or single pictures).

Due to the ego-dystonic nature of intrusive recollections, it is not uncommon for traumatised individuals to employ various avoidance strategies to circumvent or minimise the impact of such recollections. Such avoidance strategies can either be cognitive or behavioural in nature. Examples of cognitive strategies include thought suppression and rumination, while behavioural strategies include the active avoidance of people, places, and activities that remind the individual of the original traumatic event.

## 8. The relationship between intrusive and avoidant phenomena and cognitions (schemas)

Cognitive processing models of posttrauma reactions suggest that persons enter situations with preexisting mental/cognitive schemas. These schemas contain information relating to past experience, as well as beliefs, assumptions, and expectancies with regard to future events. The experience of trauma confronts individuals with information that is inconsistent with that contained in existing schemas about their safety and invulnerability (Creamer, Burgess, & Pattison, 1992). According to Horowitz (1986), recovery can only occur once new information inherent in the traumatic experience is processed until it is brought into accord with preexisting schemas. Until a traumatic event can be assimilated and integrated into existing schematic representation, it is stored in active memory, and the psychological elements of the event continue to produce intrusive and emotionally upsetting recollections (Creamer et al., 1992). Avoidance strategies can thus be seen as a defense against the breakthrough of intrusive phenomena.

Despite providing short-term symptom relief, there is general agreement that avoidance of reminders of the trauma is a central factor in maintaining PTSD symptoms. Avoidance not only maintains intrusive phenomena, but also

precludes sufficient emotional processing of traumatic experiences and interferes with integration and restructuring of dysfunctional cognitions, perceptions and appraisals of the trauma and its associated symptomatology. The inadequate cognitive processing of distressing or traumatic events thus results in the individual appraising and organizing new information by means of dysfunctional schemas (Steil & Ehlers, 2000). This scenario is supported by Beck's theory of anxiety disorders (which includes PTSD), which purports that individuals afflicted with anxiety disorders continually structure both internal and external experiences as a sign of danger (Beck, Emery, & Greenberg, 1985). This predisposition results in the displacement of more adjusted schemas and creates a systematic distortion in the information processing processes. The failure of adequate cognitive processing of initial traumatic or distressing events could also explain why individuals suffering from anxiety disorders have a dominant modus of vulnerability. This vulnerability modus is responsible for the activation of schemas that are hypersensitive to any indication of danger (Beck et al., 1985). In light of the above-mentioned discussion, it can be assumed that individuals afflicted with anxiety disorders are beset by feelings of insecurity, vulnerability, danger, and an overwhelming sense of helplessness and lack of both internal and external control.

**9. Personal trauma history and vicarious traumatisation**

A number of factors can result in helpers being more susceptible to the effects of vicarious trauma; these include working in isolation, an excessive caseload of trauma clients, length of time doing trauma work, level of organisational support and personal supervision (Pearlman & Mac Ian, 1995). One factor, namely the helper's personal trauma history, appears to make vicarious trauma more likely

and more intense (Neuman & Gamble, 1995). In a study of trauma therapists conducted by Pearlman and Mac Ian (1995), therapists with a personal trauma history showed significantly more disruptions on the Safety, Self-Trust, Other-Trust and Self-Esteem subscales of the Traumatic Stress Institute Belief Scale (TSIBS) and more intrusive symptoms, than did therapists without a personal trauma history. Results reported by Follette, Polusny and Milbeck, (1994) provided further support for the aforementioned authors' findings. Similarly, Cunningham (1996) found that helpers reporting a history of sexual abuse reported significantly more disruptions in schemas relating to Self-Safety, Self-Esteem, and Other-Esteem. However, a study by Schauben and Frazier (1995) found that helpers with a personal trauma history were no more distressed than those without a history of personal trauma. While for some helpers with a personal trauma history, helping others can provide meaning, personal healing and a way of transforming traumatic experiences, this opportunity is, however, apparently not without concomitant psychological risk (Pearlman, 1994).

**10. Utilisation of coping strategies and vicarious traumatisation**

According to Lazarus (1977), the concept of coping is intimately linked to that of stress. According to him, a distinction can be made between three basic types of stress, namely systemic/physiological, psychological, and social stress. Lazarus (1966) argued that stress encompasses three distinct processes, namely primary appraisal (perception of threat to oneself), secondary appraisal (bringing a potential response to the threat to mind), and coping. The process of coping can be defined as efforts to master conditions of harm, threat, or challenge when routine or automatic response is not readily available. In light of the abovementioned description, the extent to which helpers are affected by their

exposure to victims appears to be greatly influenced by the coping strategies they employ. Schauben and Frazier (1995) found that the utilisation of more active coping (taking active steps to try to remove or circumvent the stressor or to ameliorate its effects) and planning (thinking about how to cope with a stressor), resulted in fewer disruptions in beliefs about the world, fewer PTSD symptoms, less vicarious trauma, less negative affect, and less burnout. The use of behavioural disengagement (reducing one's effort to deal with the stressor, or giving up the attempt to attain goals with which the stressor is interfering) was associated with higher symptom levels. Follette et al. (1994) also reported that the use of more positive coping strategies were associated with lower symptom levels. Negative coping strategies such as using drugs or alcohol, withdrawing from others, and attempting to forget about difficult case material were also reported. According to Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen (1986) these negative strategies may be used when situations are appraised as having to be accepted and endured, which may indeed be the case with helpers dealing with sexual abuse if they feel powerless to effect change on behalf of their clients.

## 11. Objectives, aims and hypotheses

The general objective of the present study was to investigate the nature and incidence of vicarious trauma symptomatology (i.e., needs/schemas, intrusive images and avoidance) and its relationship to potentially related variables (i.e., previous trauma history and utilisation of certain coping strategies) in a group of members of the South African Police Services (SAPS) Child Protection Unit (CPU).

The more specific aims of the present study were the following:

(i) To ascertain whether CPU members were experiencing vicarious trauma symptomatology (i.e., disruption in needs/schemas and intrusive images and avoidance).

(ii) To determine the strength of the relationship between the disruption of needs/schemas, and the occurrence of intrusion and avoidance symptoms.

(iii) To investigate whether individuals with a personal trauma history differed significantly from those without a trauma history with regard to their experience of vicarious trauma symptomatology.

(iv) To gauge whether the utilisation of specific coping strategies were associated with disruptions in cognitive schemas, and trauma-related intrusion and avoidance symptoms.

From these aims the following hypotheses were proposed:

Hypothesis 1: The participants will exhibit a marked and specific pattern of disruption in needs/schemas, demonstrated by TSIBS scores which will, in comparison with three control groups (Traumatic Stress Institute/Center for Adult and Adolescent Psychotherapy [TSICAAP], 1998b), be (a) significantly higher than mental health professionals, (b) significantly lower than chronic mental health patients, and (c) in total not significantly different from outpatient mental health clients but higher on beliefs related to safety and the trust and esteem of others.

Hypothesis 2: The participants will exhibit prominent signs of trauma related intrusive imagery and avoidance phenomena, demonstrated by significant proportions of the sample falling in the medium and

high symptom frequency categories of the Impact of Event Scale (IES; Horowitz, Wilner, & Alvarez, 1979).

Hypothesis 3: There will be a significant relationship between the disruption of cognitive schemas and the occurrence of intrusion and avoidance symptoms, demonstrated by statistically significant correlations between the TSIBS and the IES.

Hypothesis 4: The participants with a personal history of physical (including sexual) and/or emotional abuse will, in comparison with participants without such a history, exhibit significantly more vicarious traumatisation reflected by significantly higher scores on the TSIBS and the IES.

Hypothesis 5: The utilisation of positive coping strategies, as measured by the positive coping subscales of the COPE Questionnaire (COPE; Carver, Scheier, & Weintraub, 1989) will demonstrate significant negative correlations with vicarious trauma symptomatology, as reflected by the total score of the TSIBS and the total and subscale scores of the IES.

Hypothesis 6: The utilisation of negative coping strategies, as measured by the negative coping subscales of the COPE, will demonstrate significant positive correlations with vicarious trauma symptomatology, as reflected by the total score of the TSIBS and the total and subscale scores of the IES.

# 12. METHOD

## 12.1 Research design

An exploratory cross-sectional research design was utilised in the present study.

## 12.2 Participants

A sample of police personnel on active duty at the South African Police Services (SAPS) Child Protection Unit (CPU) in the Western Cape (Goodwood and Mitchells Plain units), participated in the present study. The composition of the sample in terms of gender and history of physical (including sexual) and/or emotional abuse is presented in Table 1. Data regarding a personal history of physical (including sexual) and/or emotional abuse was obtained by examining participants' responses to the question "Do you have a personal history of physical (including sexual) and/or emotional abuse?" (see section 12.3.4 for further details). Participants ranged in age from 26 to 42 years with a mean age of 34 years. The mean number of years employed at the CPU was 3.3 years. Twenty-nine out of a total available staff compliment of 35 members were included in the final sample for the study. The remaining 6 members were unavailable to participate in the study due to training commitments, study, and sick leave. Exclusion criteria were illiteracy in English and Afrikaans.

The three control groups (TSICAAP, 1998b) comprised Mental Health Professionals (MHP), Outpatient Mental Health Clients (OPC), and Chronic Mental Health Patients (CP). The data for the MHP was obtained from studies that researched vicarious traumatisation among mental health professionals. Data collected from various mental health professionals by the Traumatic Stress Institute (TSI) whilst conducting training in the field, was also included. The CP

group included inpatients and partial patients, and the OPC group was comprised largely of TSI clients and clients of other clinicians who shared their data with the TSI. All data was based on the results of the Traumatic Stress Institute Belief Scale (TSIBS). The number of subjects in each group was 247, 186, and 118, respectively. Demographic information such as age and gender was not available. Precise selection criteria were unknown, but descriptive statistics for the three groups were available, however.

Table 1

Frequency Distribution of Participants According to Gender and Presence of a Trauma History of Abuse

| | Trauma History of Abuse | |
|---|---|---|
| | Present | Absent |
| | n (%) | n (%) |
| Gender | | |
| Male | 6 (30) | 14 (7) |
| Female | 3 (33.3) | 6 (66.7) |

**12.3 Measures**

The section that follows will discuss the three measures utilised in the present study in terms of a number of characteristics, namely what the various scales measure, number of items per subscale, example items of the various subscales, and where available, psychometric properties of the measures and there respective subscales. The procedure followed to identify the presence of a history of abuse, will also be discussed.

### 12.3.1 Traumatic Stress Institute Belief Scale (Revision L)(TSIBS; Traumatic Stress Institute/Center for Adult and Adolescent Psychotherapy [TSICAAP], 1998a)

The TSIBS is an 80-item Likert-scale that measures the degree of disruption in cognitive schemas. It assesses disruptions in the five psychological need areas (Safety, Trust, Esteem, Intimacy and Control) identified by Constructivist Self Development Theory (CSDT) as sensitive to the effects of traumatic experiences and vicarious traumatisation. Within each area, the scale contains items intended to assess disruptions related to self and to others (Pearlman & Saakvitne, 1995a). The ten subscales are: (1) Self-safety, which measures the need to feel secure and reasonably invulnerable to harm inflicted by self or others. The subscale is comprised of nine items, an example item being " I generally feel safe from danger". The alpha coefficient for the subscale was .88. (2) Other-safety refers to the need to feel that valued others are reasonably protected from harm inflicted by oneself or others. The subscale has nine items, an example item being "I worry a lot about the safety of loved ones". The alpha coefficient for the subscale was .75. (3) Self-trust assesses the need to trust one's own judgment. The self-trust subscale has seven items, an example being "I feel uncertain about my ability to make decisions". The alpha coefficient for the subscale was .88. (4) Other-trust assesses the need to rely on others. The subscale has eight items, an example being "People shouldn't place to much trust in their friends". The alpha coefficient for the subscale was .89. (5) Self-esteem gauges the need to feel valuable and worthy of respect. The subscale consists of nine items, an example being "Mostly, I don't feel like I deserve much". The alpha coefficient for the subscale was .91. (6) Other-esteem assesses the need to value and respect others and consists of 8 items. An item example being, "I often think the worst of

others". The alpha coefficient for the subscale was .79. (7) Self-intimacy assesses the need to feel connected to oneself. The subscale consists of seven items, an example being "I can't stand to be alone". The alpha coefficient for the subscale was .88. (8) Other-intimacy gauges the need to feel connected to others. The subscale consists of eight items, an example being "I often feel cut off and distant from other people". The alpha coefficient for the subscale was .88. (9) Self-control assesses the need to manage one's own feelings and behaviours and consists of eight items. An item example is "Sometimes I feel I can't control myself". The alpha coefficient for the subscale was .85. (10) Other-control gauges the need to manage interpersonal situations. The subscale consists of seven items, an example item being "I don't have much control in my relationships". The alpha coefficient for the subscale was .73. Participants were asked to rate on a 6-point Likert scale (1 = disagree strongly, 6 = agree strongly) the extent to which they agreed with the statements. Subscale scores were computed by reversing the scoring of appropriate items, summing item scores and dividing the subscale sum score by the number of items in the subscale. Scoring of the following items were reversed: 1, 2, 3, 6, 9, 12, 15, 18, 26, 27, 28, 29, 32, 33, 35, 36, 47, 50, 53, 54, 57, 58, 61, 70, 74, and 77. The total score was the sum of all items after the mentioned items had been scored in reversed.

### 12.3.2 Impact of Event Scale (IES; Horowitz, Wilner, & Alvarez, 1979)

The IES is a self-report scale that is used to assess the frequency of trauma-related intrusive images and avoidance symptoms (Briere & Elliott, 1998). It consists of 15 items using 4-point frequency scales (0 = not at all, 1 = rarely, 3 = sometimes, 5 = often). The following written instructions preceded the scale: "Below is a list of comments made by people after stressful life events. Keeping a

case/s which you have investigated, and which you considered particularly stressful in relation to your other cases in mind, kindly mark the item indicating how frequently these comments were true for you. If they did not occur, mark the 'not at all' column". The IES total score has a range of 0 to 75, with a higher score reflecting a greater frequency of intrusive thoughts and attempts at avoidance. Subscale scores can also be computed for the seven intrusion items, with a possible range of 0-35, and the eight avoidance items, with a possible range of 0-40 (Joseph, 2000). Item examples for the intrusion subset included statements such as "I had dreams about it", "Pictures about it popped into my mind", and for the avoidance subset "I tried not to think about it" and "I avoided letting myself get upset when I thought about it or was reminded of it". Horowitz (1982) identified normative cut-off points for low, medium, and high symptom levels corresponding to levels of clinical concern using the IES total score (low = < 8.5; medium = 8,6 to 19.0; and high = >19). According to Bisbey and Bisbey (1998), any score over 20 can be considered to be indicative of a traumatised individual.

Horowitz et al. (1979) reported satisfactory internal reliability (Cronbach's $\alpha$ = .86 for the IES total score, .78 for Intrusion, and .82 for Avoidance). Test-retest reliability of r = .89 for Intrusion and r = .79 for Avoidance was reported over a 1 week period. Despite concerns being raised about the validity of the IES, the IES has been shown to differentiate between those who received a diagnosis of PTSD and those who did not (Bryant & Harvey, 1996). It must however be kept in mind that the IES was not developed to measure PTSD per se but that it was introduced by Horowitz and his colleagues as a measure of subjective distress, that is, avoidant and intrusive signs and symptoms of PTSD. The strength of correlation between scores on the IES and various PTSD measures supported

the aforementioned statement (Joseph, 2000). Research conducted by Joseph, Dalgleish, Thrasher, Yule, Williams and Hodgkinson (1996) has shown that higher scores on the IES were able to predict greater subsequent distress and PTSD.

### 12.3.3 The COPE Questionnaire (COPE; Carver, Scheier, & Weintraub, 1989)

The COPE is a 53 item index of coping with general stressors comprising 14 discreet scales for the following coping strategies: Active Coping, Planning, Suppressing Competing Activities, Restraint Coping, Seeking Social Support for Instrumental Reasons, Seeking Social Support for Emotional Reasons, Positive Reinterpretation and Growth, Acceptance, Turning to Religion, Focusing on the Venting of Emotion, Denial, Behavioural Disengagement, Mental Disengagement, and a single item measure of Alcohol-Drug Disengagement (Lynne & Roger, 2000). Despite not dividing the COPE into distinct positive and negative coping categories, Carver et al. (1989) describe the various subscales in terms of their functionality (i.e. the tendencies to facilitate versus the tendencies to obstruct adaptive coping). However, for the purpose of the present study, based on the description of the subscales, the COPE subscales will be divided into positive (facilitative) and negative (obstructive) coping strategy categories. The positive coping strategy category will include the following coping subscales: (1) Active Coping, (2) Planning, (3) Suppression of Competing Activities, (4) Restraint Coping, and (5) Seeking Social Support for Instrumental Reasons. The negative coping categories will include: (6) Seeking Social Support for Emotional Reasons, (7) Positive Reinterpretation and Growth, (8) Acceptance, (9) Turning to Religion, (10) Focusing on the Venting of Emotion, (11) Denial, (12) Behavioural

Disengagement, (13) Mental Disengagement, and (14) Alcohol-Drug Disengagement.

Scores are obtained using a 4-point frequency scale (1 = I usually don't do this at all; 2 = I usually do this a little bit; 3 = I usually do this a medium amount, 4 = I usually do this a lot). Cronbach's alpha reliability coefficients computed for each scale showed that the values were acceptably high (ranging between .45 and .92), with only one value, namely Mental Disengagement, falling below .6. This scale (Mental Disengagement), differs form the others in being more of a multiple-act criterion, and thus lower reliability is not totally unexpected. Test-retest reliability suggests that the self-reports of coping tendencies that are measured by the COPE are relatively stable (Carver et al, 1989).

### 12.3.4 History of abuse

In order to ascertain whether or not the CPU members had a personal history of abuse, they were requested to answer "yes" or "no" to the following question: "Do you have a personal history of physical (including sexual) and/or emotional abuse?". Furthermore, they were verbally requested to consider their answer in light of the following question: "Have you in your past been physically (including sexually) and emotionally abused to such an extent, that, if it had been experienced by one of your clients, you would have regarded it as marked abuse (i.e. to such an extent that it can have a negative impact on the medium to long-term functioning of the average person)?" A constructivist perspective requires that the participants, rather than the researcher, define what is deemed traumatic.

## 12.4 Procedure

The commanding officers of each of the respective units were consulted and permission was obtained to complete the research. Participants were visited at

their place of work (Goodwood and Mitchells Plain Child Protection Units, respectively) and requested to complete the questionnaires. This was done during working hours. Subjects were provided with written instructions. In addition, verbal reminders on how to approach the questions were given prior to completing the questionnaires. Participants completed the TSIBS, IES, and the COPE. Selected demographic information was also obtained.

### 12.5 Statistical Analysis

In order to assess whether the CPU group exhibited disrupted cognitive schemas, mean scores for each of the ten subscales and the total score of the TSIBS were computed.

The presence and level of severity of intrusive and avoidant phenomena were examined based on the computation of means and a total score for the IES. A frequency distribution was calculated for the IES total score reflecting low, medium and high symptom levels. Spearman correlation coefficients were conducted to determine whether statistically significant relationships existed between the TSIBS total and subscale scores, and the total score and Intrusion and Avoidance subscales of the IES. T-tests were conducted to ascertain whether significant differences existed between the mean scores obtained by the CPU, mental health professionals, outpatient mental health clients, and chronic mental health patients on the TSIBS. Due to the fact that multiple t-tests were computed, a Bonferroni correction was used to control for the familywise error rate. This was done by correcting the level of significance for each test such that the overall Type I error rate ($\alpha$) at all comparisons remains at 0.01 or 0.05. A further t-test was conducted to ascertain whether statistically significant

differences existed between the CPU members with a personal trauma history of abuse, and those without such a history, on the TSIBS and the IES.

Further correlations were calculated between the COPE subscales and the TSIBS total score and the IES total and subscale scores.

## 13. Results

### 13.1 Descriptive statistics

Descriptive statistics, that is, the means and standard deviations of the self-report measures obtained for the scales used in the present study are reported in Table 2.

Table 2

Descriptive Statistics of the Self-Report Scales

| Scales | $\overline{X}$ | SD |
|---|---|---|
| TSIBS | | |
| Self-Safety | 3.06 | 0.704 |
| Other-Safety | 3.46 | 0.794 |
| Self-Trust | 2.46 | 0.867 |
| Other-Trust | 3.58 | 0.901 |
| Self-esteem | 2.359 | 0.808 |
| Other-Esteem | 3.014 | 0.673 |
| Self-Intimacy | 2.731 | 0.795 |
| Other-Intimacy | 2.779 | 0.849 |
| Self-control | 3.276 | 1.028 |
| Other-Control | 2.945 | 0.966 |
| TSIBS Total | 238.103 | 49.51 |

| | | |
|---|---|---|
| IES | | |
| Intrusion | 17.86 | 11.16 |
| Avoidance | 19.10 | 9.07 |
| IES Total | 36.97 | 18.52 |
| COPE | | |
| AC | 11.03 | 3.05 |
| P | 11.07 | 3.53 |
| SCA | 10.76 | 2.28 |
| RC | 10.48 | 2.53 |
| SSSIR | 9.68 | 3.04 |
| SSSER | 8.93 | 2.91 |
| PRG | 11.07 | 2.76 |
| A | 11.59 | 2.72 |
| TR | 11.55 | 4.20 |
| FVE | 10.00 | 3.15 |
| D | 8.34 | 3.12 |
| BD | 8.66 | 2.97 |
| MD | 10.34 | 2.22 |

Note. TSIBS = Traumatic Stress Institute Belief Scale; IES = Impact of Event Scale; COPE = Cope Questionnaire; AC=Active Coping; P=Planning; SCA=Suppression of Competing Activities; RC=Restraint Coping; SSSIR=Seeking Social Support for Instrumental Reasons; SSSER=Seeking Social Support for Emotional Reasons; PRG=Positive Reinterpretation and Growth; A=Acceptance; TR=Turning to Religion; FVE=Focusing on and Venting of Emotions; D=Denial; BD=Behavioural Disengagement; MD=Mental Disengagement

### 13.2 Disruption in cognitive schemas: A comparison of the CPU and three control groups on the TSIBS total and subscale scores

In order to investigate the occurrence, nature and magnitude of disruption in cognitive schemas within the CPU group (Hypothesis 1) their TSIBS mean scores were compared by means of t-tests with those of three control groups, as reported by the TSICAAP (1998b). The means and standard deviations of the four groups are presented in Table 3 and the results of the t-tests in Table 4. A Bonferroni correction for multiple t-tests was used, controlling for the familywise error rate. This was done by correcting the level of significance for each test such that the overall Type I error rate ($\alpha$) at all comparisons remains at 0.01 or 0.05. For ten t-tests the corrected criterion for significance is 0.001 for overall $\alpha = 0.01$ and 0.005 for overall $\alpha = 0.05$.

Table 3

Means and Standard Deviations of the CPU Group and Three Control Groups on the TSIBS

| Subscales | CPU (N=29) $\overline{X}$ (SD) | MHP (N=247) $\overline{X}$ (SD) | OPC (N=186) $\overline{X}$ (SD) | CP (N=118) $\overline{X}$ (SD) |
|---|---|---|---|---|
| Self-Safety | 3.06(.704) | 2.05(.50) | 2.68(.92) | 3.58(1.15) |
| Other-Safety | 3.46(.794) | 1.99(.60) | 2.57(.69) | 3.18(.81) |
| Self-Trust | 2.46(.867) | 2.18(.56) | 2.97(.87) | 3.52(1.02) |
| Other-Trust | 3.58(.901) | 2.10(.62) | 2.90(.89) | 3.70(.95) |
| Self-esteem | 2.35(.808) | 1.99(.60) | 2.60(.97) | 3.29(1.18) |
| Other-Esteem | 3.01(.673) | 1.84(.62) | 2.62(.63) | 3.15(.82) |
| Self-Intimacy | 2.73(.795) | 2.07(.57) | 2.77(.86) | 3.67(1.04) |
| Other-Intimacy | 2.77(.849) | 2.04(.74) | 3.08(.92) | 3.62(.95) |
| Self-control | 3.27(1.028) | 2.20(.72) | 3.40(.98) | 4.09(1.04) |
| Other-Control | 2.94(.966) | 2.29(.68) | 2.90(.74) | 3.33(.79) |
| Total Score Min=145 Max = 357 | 238.10(49.51) | 166.83(36.23) | 227.08(51.35) | 280.64(59.60) |

Note. TSIBS = Traumatic Stress Institute Belief Scale; CPU = Child Protection Unit; MHP = Mental Health Professionals; OPC = Outpatient Mental Health Clients; CP = Chronic Mental Health Patients

Adapted from "TSI Belief Scale Scores, Subscale Means and F Tests for Revision L and Revision M". Prepublication Material, TSICAAP, 1998 (b).

Table 4

Differences Between the CPU Group and Three Control Groups on the TSIBS Scores

| TSIBS Scales | CPU-MHP t (p) df=274 | CPU-OPC t(p) df=213 | CPU-CP t(p) df=145 |
|---|---|---|---|
| Self-Safety | 9.81(0.00)* | 2.13(0.00)* | -2.33(0.02) |
| Other-Safety | 12.03(0.00)* | 6.33(0.00)* | 1.67(0.09) |
| Self-Trust | 2.38(0.01) | -2.94(0.01) | -5.15(0.00)* |
| Other-Trust | 11.52(0.00)* | 3.82(0.00)* | -0.62(0.53) |
| Self-Esteem | 3.01(0.00)* | -1.27(0.20) | -4.02(0.00)* |
| Other-Esteem | 9.56(0.00)* | 3.10(0.00)* | -0.83(0.40) |
| Self-Intimacy | 5.64(0.00)* | -0.23(0.81) | -4.54(0.00)* |
| Other-Intimacy | 5.01(0.00)* | -1.65(0.09) | -4.36(0.00)* |
| Self-Control | 7.24(0.00)* | -0.63(0.52) | -3.78(0.00)* |
| Other-Control | 4.67(0.00)* | -4.04(0.28) | -2.25(0.02) |
| Total Score | 9.61(0.00)* | 1.08(0.28) | -3.55(0.00)* |

Note. TSIBS =Traumatic Stress Institute Belief Scale; CPU = Child Protection Unit; MHP = Mental Health Professionals; OPC = Outpatient Mental Health Clients; CP = Chronic Mental Health Patients
* p = <.005

With regard to the total score, the results indicate that the CPU was significantly higher than the MHP. They were also higher that the OPC, but the difference was not statistically significant. The CPU was however significantly lower than the CP. The CPU was significantly higher than the OPC with regard to safety (self and other) and other-trust and esteem. Hypothesis 1 should therefore not be rejected.

### 13.3 Occurrence of intrusion and avoidance symptoms

Hypothesis 2 purports that participants will exhibit prominent signs of trauma-related intrusion and avoidance phenomena, demonstrated by significant proportions of the sample falling in the medium and high symptom frequency categories of the IES. This was investigated by means of a frequency distribution. The results appear in Table 5.

Table 5

Frequency Distribution of CPU Members in Different Symptom Level Categories of Clinical Concern According to the IES Total Score

| Symptom Level Categories | Frequency | Percentage |
|---|---|---|
| < 8.5 (Low) | 3 | 10.3 |
| 8.6 – 19 (Medium) | 4 | 13.8 |
| > 19 (High) | 22 | 75.9 |

Note. IES = Impact of Event Scale

Table 5 shows the frequency and percentage of responses according to low, medium and high symptom levels, as identified by Horowitz (1982). The results reflect that 22 of the 29 participants (75.9%) reported symptom levels corresponding to the high category of clinical concern, and should be regarded as traumatised according to Bisbey and Bisbey (1998). The results, therefore, lend support for Hypothesis 2 and it should thus not be rejected.

### 13.4 Relationship between the disruption of cognitive schemas and the occurrence of intrusion and avoidance symptoms

In order to investigate the strength of the relationship between the disruption of cognitive schemas, and the occurrence of intrusion and avoidance symptoms (Hypothesis 3), Spearman correlations were computed between the scores obtained from the TIBS and the IES. The results are presented in Table 6.

Table 6

Spearman Correlations Between the Total and Subscale Scores of the TSIBS and the IES

| TSIBS | IES Intrusion | IES Avoidance | IES Total |
|---|---|---|---|
| Self-Safety | .287 | .199 | .266 |
| Other-Safety | .322 | .328 | .351 |
| Self-Trust | .184 | .236 | .163 |
| Other-Trust | .155 | -.100 | .036 |
| Self-Esteem | .363 | .400* | .381* |
| Other-Esteem | .340 | .250 | .310 |
| Self-Intimacy | -.111 | -.010 | -.103 |
| Other-Intimacy | .662** | .400* | .611** |
| Self-Control | .334 | .173 | .279 |
| Other-Control | .262 | .215 | .2.37 |
| Total | .318 | .243 | .285 |

Note. TSIBS = Traumatic Stress Institute Belief Scale; IES = Impact of Event Scale
* p = <0.05
** p = <0.01

The results depicted in Table 6 reflect no significant correlations between the overall disruption of cognitive schemas and intrusion and avoidance symptoms. A significant positive correlation, however, was found between the TSIBS Self-Esteem, IES Avoidance ($p<0.05$), and the IES total score ($p<0.05$), TSIBS Other-Intimacy and IES Intrusion ($p<0.01$), TSIBS Other-Intimacy and IES Avoidance ($p<0.05$), and TSIBS Other-Intimacy and the IES total score ($p<0.01$). In light of the insignificant correlations between the IES and TSIBS total scores, however, Hypothesis 3 should be rejected.

### 13.5 Personal trauma history

According to Hypothesis 4, participants with a marked personal trauma history will, in comparison with participants without such a history, exhibit significantly more vicarious traumatisation reflected by significantly higher scores on the TSIBS and the IES.

The TSIBS and IES mean scores of the group without a personal trauma history of abuse was compared by means of t-tests with the group who reported a personal trauma history of abuse. The results are depicted in Table 7.

Table 7

Differences Between the CPU Groups With and Without a Personal Trauma History of Abuse on the TSIBS and IES

| Scales | n | $\overline{X}$ | SD | df | t | p |
|---|---|---|---|---|---|---|
| TSIBS | | | | | | |
| With | 9 | 253.55 | 36.00 | | | |
| Without | 20 | 231.15 | 53.87 | 27 | 1.13 | .267 |
| IES | | | | | | |
| With | 9 | 40.00 | 16.57 | | | |
| Without | 20 | 35.60 | 19.58 | 27 | .585 | .563 |

Note. TSIBS=Traumatic Stress Institute Belief Scale; IES=Impact of Event Scale

The results indicate that the CPU group with a personal trauma history of abuse (with) obtained higher mean scores than the group without such a history (without) on both the TSIBS and the IES. However, the difference was not statistically significant. Hypothesis 4 can therefore be rejected.

### 13.6 Relationship between functionality (positive or negative) of the coping strategies and vicarious trauma symptomatology

In order to investigate whether the utilisation of positive coping strategies demonstrated significant negative correlations with vicarious trauma symptomatology, as reflected by the total score of the TSIBS and the total score and subscales of the IES (Hypothesis 5), Spearman correlations between scores on the COPE inventory, and the TSI total score, and the total and subscale scores on the IES were computed. A similar correlational study was computed to investigate whether the utilisation of negative coping strategies will demonstrate significant positive correlations with vicarious trauma symptomatology (Hypothesis 6). The results are depicted in Table 8.

Table 8

Spearman Correlations Between the Positive and Negative Coping Strategies of the COPE, and the TSIBS Total Score and IES Total and Subscale Scores

| COPE | TSIBS | IES Total | IES Intrusion | IES Avoidance |
|---|---|---|---|---|
| Positive | | | | |
| AC | -.334 | .150 | .088 | .146 |
| P | -.411* | -.099 | -.177 | -.071 |
| SCA | -.165 | -.043 | -.136 | .145 |
| RC | .005 | .114 | .029 | .075 |
| SSSIR | -.132 | .241 | .156 | .282 |
| Negative | | | | |
| SSSER | -.212 | -.035 | -.029 | .073 |
| PRG | -.271 | .259 | .152 | .341 |
| A | -.099 | .143 | .080 | .184 |
| TR | -.256 | -.165 | -.179 | -.083 |
| FVE | .114 | .293 | .349 | .148 |
| D | .531** | -.008 | .098 | -.027 |
| BD | .391* | .241 | .254 | .249 |
| MD | .259 | .008 | .114 | -.127 |

Note. TSIBS=Traumatic Stress institute Belief Scale; IES=Impact of Event Scale AC=Active Coping; P=Planning; SCA=Suppression of Competing Activities; RC=Restraint Coping; SSSIR=Seeking Social Support for Instrumental Reasons; SSSER=Seeking Social Support for Emotional Reasons; PRG=Positive Reinterpretation and Growth; A=Acceptance; TR=Turning to Religion; FVE=Focusing on and Venting of Emotions; D=Denial; BD=Behavioural Disengagement; MD=Mental Disengagement

* $p = <0.05$

** $p = <0.01$

The results indicate a significant negative correlation between Planning (positive strategy) and the TSI total score ($p<0.05$). The results also reflected significant

positive correlations between Denial (negative strategy) and the TSI total score ($p<0.01$) and Behavioural Disengagement (negative strategy) and the TSI total score ($p<0.05$). The results lend partial support for both Hypotheses 5 and 6, and they should thus not be rejected.

## 14. Discussion

The primary aim of the study was to investigate the prevalence of vicarious traumatisation, with specific emphasis on the disruption of psychological need areas and their related cognitive schemas, and the occurrence of trauma-related intrusion and avoidance phenomena amongst members of the South African Police Service Child Protection Unit (CPU) in the Western Cape. According to McCann and Pearlman (1990b), disruptions in the above-mentioned areas, as well as other aspects of the self as delineated by Constructivist Self Development Theory (CSDT), are inevitable consequences of engaging empathically with survivors of traumatic experiences. A secondary aim of the study was to ascertain whether variables such as a personal trauma history of abuse and the utilisation of specific coping strategies, rendered individuals more susceptible to the effects of vicarious traumatisation.

### 14.1 Disruption in psychological need areas and related cognitive schemas

In terms of the general level of disruption of psychological need areas and related cognitive schemas, it was expected (see Hypothesis 1) that the child protection unit (CPU) would exhibit significantly higher levels of disruption when compared to mental health professionals (MHP), significantly lower levels in comparison to the chronic mental health patients (CP), and that they would not differ significantly from the outpatient mental health (OPC) group. Before discussing the results related to Hypothesis 1, it was deemed valuable to first clarify and

motivate what was expected and why. With regard to the part of the hypothesis related to the mental health professionals group (i.e., Hypothesis 1a), what was expected can be motivated by the fact that the average mental health professional (i.e. psychiatrist, psychologist, social worker, etc) does not usually deal exclusively with cases involving sexual abuse, nor is their clientele comprised solely of child survivors. Both these factors (i.e. sexual abuse, and working with child victims) have been shown to significantly increase the likelihood of adverse emotional/psychological reactions and vicarious traumatisation in helpers working primarily with child victims, and more specifically, child victims of sexual abuse (Martin, McKean, & Veltkamp, 1986; Dyregrov & Mitchell, 1992; Figley, 1995). Pearlman (1994) purports that the reason why working with child survivors of trauma, as opposed to adult survivors, is even more difficult and painful for helpers, is that children have fewer resources to understand their experience, less language to name the complex, powerful feelings and thoughts that accompany the traumatic life events, and little autonomous access to treatment.

The results of the present study confirmed that the CPU group did indeed exhibit a significantly greater degree of disruption in needs/schemas in comparison to the MHP group. The results of the present study were supported by the findings of Martin, McKean, and Veltkamp, 1986; Dyregrov and Mitchell, 1992; Pearlman, 1994.

With regard to the second part of the first hypothesis (see Hypothesis 1b), it was expected that the CPU group would demonstrate a significantly lower level of need/schema disruption than the CP group. By definition, the chronic patient group would include individuals suffering from persistent and unremitting

emotional/psychological symptomatology, possibly resulting in reduced levels of functionality. When such a group is compared on a measure of psychological/emotional disruption to a group deemed psychologically, socially and occupationally functional (i.e., the CPU group), the expectations related to these groups, as formulated in Hypothesis 1b, should be clear. The results of the present study showed that the CPU group did in fact demonstrate a significantly lower level of need/schema disruption than the CP group.

It was furthermore expected that the CPU group would not differ significantly from the outpatient mental health group in terms of overall psychological need/schema disruption (see Hypothesis 1c), although it was anticipated that they would exhibit a significantly greater degree of disruption in needs/schemas related to the safety of self and others, as reflected by the TSIBS Self-Safety and Other-Safety subscales, respectively. The results of the present study indicated, as hypothesised, that the CPU group did indeed exhibit a greater degree of vulnerability than the outpatient mental health group with regard to self-safety and other-safety. At least part of the reason why it was expected, and which may therefore also be used in explaining the obtained results, is related to the meaning of the concepts self-safety and other-safety (i.e., related to the reasons and implications of it becoming disturbed). Self-safety refers to peoples' need to feel secure and reasonably invulnerable to harm inflicted by self or others, for example, feeling safe from danger, worrying about their own safety, concern regarding their capacity to harm themselves, and their ability to protect themselves from harm. Other-Safety refers to their need to feel that valued others are reasonably well protected from harm inflicted by themselves or others, for example, worrying excessively about the safety of loved ones, fearing that when

their loved one's are not with them that they may be in danger, concern regarding their capacity to harm others, and a feeling that their actions may pose a danger to others. The explanation as to why these findings were expected possibly relates to the fact that in contrast to the CPU group, most mental health outpatients were not regularly exposed to serious injury or abuse by others. It is also conceivable that when the victim is a child, the emotional or psychological sequelae are greater than were the victim an adult. A possible reason underlying this rationalisation, is that adults in all probability, have an inherent need to protect and care for children. Dealing with children after they have already been abused, may result in feelings of helplessness and lack of control amongst the CPU group – factors which may further exacerbate the impact of their work.

The potential role of "helplessness" and "lack of control" in the development of disturbances in safety needs/schemas, may also be explained by constructs and theories other than the Constructivist Self Development theory (CSDT), for example the role of "a sense of uncontrollability" and "unpredictability" in the development of anxiety disorders (Barlow, 1988), a breakdown of the illusion of invulnerability by a traumatic event (Janoff-Bulman, 1992), a person entering a "vulnerability mode", which activates danger schemata, when a person perceives danger (Beck et al., 1985), disruptions in safety schemas (Cunningham, 1996), alteration of the helper's (of traumatised children) sense of vulnerability and security regarding their own children and other children they love (Dyregrov & Mitchell, 1992), and a disruption of paramedics' (doing trauma work) beliefs about the vulnerability of significant others to future harm or loss (Galloucis, 1995).

In addition to the expectation that the CPU group (in comparison to the outpatient mental health group) would exhibit a significantly greater degree of disruption in

their safety schemas, significant disruption in the Other-Trust and Other-Esteem schemas, was also expected (see Hypothesis 1c). This expectation was in fact verified by the findings of the present study. This can potentially be understood in light of the fact that the CPU group is continuously exposed solely to children who have been sexually traumatised as a result of a perpetrators willful, violent, and personal intent. Furthermore, it is a widely held assumption that the majority of perpetrators of child sexual abuse are either members of the child's family, or individuals known to and trusted by the family and child alike, for example, teachers and child minders. Thus, in addition to the trauma of the sexual abuse itself, childhood victims of sexual abuse experience a betrayal of trust by someone they either loved, depended on, or cared for (Courtois, 1979). The CPU members' reactions may be regarded as a response in sympathy with those of the victims. It is thus understandable why members of the CPU exhibited a greater degree of disruption in relation to other-trust, namely feeling that they can't trust anyone, feeling that trusting other people is not very smart, and generally not believing the things other people tell them. The constant exposure to the products of the malicious, violent and intentional actions of supposedly loving, trustworthy, and caring others, is also highly unlikely to conjure up feelings of value, benevolence and respect for others, hence the disruption of schemas relating to esteem for others. Schauben and Frazier (1995), Cunningham (1996), Dyregrov and Mitchell (1992), and Astin (1997) reported analogous findings in relation to disruptions in Other-Trust and Other-Esteem schemas amongst helpers dealing with victims of sexual abuse.

### 14.2 Trauma-related intrusive imagery and avoidance phenomena

It was expected that participants would exhibit prominent signs of intrusion and avoidance phenomena and that these phenomena would be demonstrated by a significant proportion of the sample falling in the medium to high symptom frequency category of the Impact of Event Scale (IES). The present study confirmed these expectations and showed that 75.9% of the participants reported symptom levels corresponding to the high category of clinical concern. According to Bisbey and Bisbey (1998), individuals with scores of 20 (i.e., the high category) and above should be regarded as traumatised. The reasons why these findings were expected can firstly be explained in terms of McCann and Pearlman's construct of vicarious traumatisation (VT) (1990b). This construct purports that due to the empathic engagement with clients' trauma material, helpers will experience a range of general and specific responses as a result of the cumulative effects of their work. General responses, the majority of which parallel PTSD symptoms, include intrusion and avoidance phenomena. These authors also assert that a fundamental feature of VT is the disruption of the imagery component of the memory system. Such a disruption in the memory system is most likely to manifest in the form of intrusive phenomena and avoidance strategies to counteract the breakthrough of psychologically/emotionally distressing intrusive recollections. The findings of the present study appear to support this assumption and corroborate the findings of Paivio (1986) and Horowitz (1976). Despite the general lack of empirical reports documenting the effects on helpers providing services to victims of sexual abuse (as opposed to primary victims) a number of studies have shown that helpers have experienced PTSD symptoms secondary to their involvement with traumatised (sexually and

physically) clients. These include Pearlman and Mac Ian (1995), Mitchell (1984), Dyregrov and Mitchell (1992), Martin, McKean and Veltkamp (1986), Kassam-Adams (1994), and Figley (1983; 1989).

Although any involvement with traumatised individuals can result in emotional/psychological consequences for the helper, it has been suggested that helpers exposed to the trauma of children exhibit more psychological distress and PTSD symptomatology. In light of the fact that members of the CPU deal solely with child victims of abuse (predominantly sexual abuse), high levels of intrusion and avoidance phenomena were expected. In a study focusing on PTSD in police working with victims, Martin McKean and Veltkamp (1986) found that PTSD symptoms were more prevalent among those members reporting the chronic stresses of working with child abuse. Furthermore, these authors found that recurrent intrusive recollections of the event, was one of the most frequently reported symptoms. According to Dyregrov and Mitchell (1992) intrusive images also appear to be more easily formed in those who work with traumatised children. Moreover, a number of other authors support the notion that providing assistance to child victims of trauma increases the potential for intense psychological reactions amongst helpers (Figley, 1995; Mitchell, 1984; Pearlman, 1994).

Furthermore, an increase in PTSD symptoms can also be expected when helpers are exposed to suffering and injury due to a perpetrator's willful, violent and personal intent, as opposed to an impersonal accident or natural disaster. In a study conduct by Kessler, Sonnega, Bromet, Hughes, and Nelson (1995), events that involved interpersonal violence gave rise to PTSD more often than events such as motor vehicle accidents and natural disasters. For example, PTSD

developed in 55% of persons who reported being raped, as compared with 7.5% of those involved in accidents. Deblinger, McLeer, Atkins, Ralphe, and Foa (1989) also found that children who had been sexually abused exhibited more intrusion and avoidance phenomena than children who had experienced other types of traumatic incidents. It can thus be assumed that as a result of the process of vicarious traumatisation, helpers who assist victims of intentional, interpersonal violence (e.g. sexual abuse), will experience symptoms that parallel those of their clients.

While the Impact of Event Scale (IES) has been widely used in the field of secondary traumatic stress/vicarious trauma to assess severity of distress, the possibility that participants are experiencing symptoms tapped by this measure for some reason other than vicarious traumatisation, cannot be ruled out. For example, it is conceivable that they have developed symptoms of depression due to long work hours and poor administrative support. However, this study was not designed to tease out alternative explanations for the symptoms.

### 14.3 The relationship between cognitive schemas and intrusion and avoidance symptoms.

It was expected that there would be a significant relationship between the disruption of cognitive schemas and the occurrence of intrusion and avoidance symptoms. This relationship would be demonstrated by statistically significant correlations between the TSIBS and the IES. The reason why this relationship was expected can possibly be understood in terms of Constructivist Self Development Theory (i.e. the theory underlying the concept of vicarious traumatisation) and cognitive processing models of posttrauma reactions. According to CSDT, individuals develop cognitive schemas, that is, assumptions, beliefs, and expectations about self and others. These schemas enable

individuals to organise their life experiences in ways that help them comprehend their world. According to McCann and Pearlman (1993) traumatic experiences result in the disruption of these schemas, more specifically schemas concerning safety, trust, esteem, intimacy and control. Cognitive processing theories suggest that traumatic experiences confront individuals with information that is inconsistent with their existing schemas, resulting in disruption. Schematic equilibrium can thus only be restored once new information inherent in the traumatic experience is integrated into a preexisting schema via the process of assimilation or accommodation. Until this is accomplished, the traumatic event will be stored in active memory and psychological elements of the event will continue to produce intrusive recollections (Creamer et al., 1992). Due to the fact that intrusive recollections are often accompanied by strong affective states, the use of cognitive, behavioural or emotional avoidance strategies in an effort to defend against the breakthrough of intrusive phenomena are not uncommon. According to Steil and Ehlers (2000), despite providing temporary symptom relief, avoidance strategies not only maintain intrusive phenomena, but also prevent the effective emotional processing and integration of dysfunctional cognitions, perceptions and appraisals of the traumatic event.

The expected findings were not verified by the general results of the present study. Significant positive correlations were however found between Self-Esteem and Avoidance and Self-Esteem and the IES total score; and Other-Intimacy and Intrusion, Avoidance, and the IES total score. Daily exposure to child victims of sexual abuse will undoubtedly over time lead to feelings of helplessness, inadequacy, and self-reproach as a result of the knowledge that there was little that could have been done by the helper to alter the situation (Dyregrov &

Mitchell, 1992). When it is considered that the central premise of the self-esteem schema concerns the need to feel valuable and worthy of respect, feelings such as helplessness, inadequacy and self-reproach are highly likely to contradict the CPU members' core beliefs about themselves. Pearlman and Saakvitne (1995) are of the opinion that disruptions in esteem that develop from vicarious traumatisation can lead to a generalised more negative sense of self-esteem, resulting in the helper becoming overly self-critical, and avoiding connection with both self and others (e.g. avoiding looking at themselves in the mirror, avoiding other people and dropping out of social or community activities). According to McCann, Sakheim, and Abrahamson (1988), avoidance techniques are often employed as a defense strategy to protect the individual from such painful and overwhelming discrepancies.

The need to feel connected and close to others (the other-intimacy schema) is one of the most fundamental human needs. However, this need is a fragile one that can be easily damaged, or even destroyed, by the insensitive, cruel and hurtful actions of others. The constant exposure to children who have been sexually victimised by others is thus highly likely to undermine the need for connection, particularly intimate connection with others knowing full well their potential to inflict harm. Intrusion and avoidance phenomena in the realm of other-intimacy can thus possibly be seen as an attempt on the part of the CPU members to integrate discrepant external information with a preexisting need/schema.

An interesting observation was that, despite the significant disruption of self-safety, other-safety, and other-trust schemas (compared to the outpatient group), no significant correlations between these schemas and intrusion and avoidance

phenomena were found. According Pearlman and Saakvitne (1995), images most likely to stay with, intrude upon, and distress the helper, are those that are in some way connected to the helper's most salient psychological needs. It can thus be argued that despite being disrupted via the process of vicarious traumatisation, self-safety -, other-safety -, and other-trust schemas were not considered as salient as the self-esteem - and other-intimacy schemas.

### 14.4 Personal trauma history

Despite the fact that the group with a personal trauma history obtained higher mean scores than the group without such a history on both the TSIBS and the IES, the differences between the two groups were not statistically significant. The absence of a significant difference may therefore suggest that the symptomatology of the participants was less related to their own personal trauma history, and more to their distress linked to the specific traumatic experiences of their clients. The results of the present study contradict the findings of Neuman and Gamble (1995), Pearlman and Mac Ian (1995), Follette, Polusny and Milbeck (1994), and Cunningham (1996). However, the findings of Schauben and Frazier (1995), which demonstrated that helpers with a personal trauma history were no more distressed than those without a history of personal trauma, were corroborated by the findings of the present study.

### 14.5 Coping strategies and vicarious traumatisation

It was expected that the utilisation of positive coping strategies would demonstrate significant negative correlations with vicarious trauma symptomatology. Conversely, the utilisation of negative coping strategies would demonstrate significant positive correlations with vicarious trauma symptomatology. It can be assumed that exposure to traumatic external

information will be experienced by the individual as psychologically stressful. In order to counteract the perceived stress and the discomfort it produces, the individual is likely to initiate and employ various coping strategies to minimise the impact of the threat on the system. The type of response initiated and implemented by the individual will determine the effectiveness of the coping. The findings of the present study showed, as expected, a significant negative correlation between the positive coping strategy "planning" and cognitive schema disruption. This finding suggests that when action strategies are implemented and various steps are considered as to how best to handle a stressor, the level of disruption in cognitive schemas decreases proportionally. It can be assumed that planning facilitates cognitive and emotional processing by allowing for the integration of new information into the system, which in turn facilitates the process of functional schema adaptation. A further possible explanation for this finding could be that the more functionally an individual thinks (i.e., the lower the level of disruption in his needs/schemas), the more he makes use of "planning". With regard to negative coping, two strategies demonstrated significant positive relationships with schema disruption (as was expected), namely denial and behavioural disengagement. These two strategies (which could potentially be considered as cognitive and behavioural avoidance phenomena), comprise the denial of the reality of the stressor, a reduction in the amount of effort to deal with the stressor, giving up on goals, and the assumption of a position of helplessness. These results are consistent with the findings of Schauben and Frazier (1995) who found that planning (thinking about how to cope with a stressor), resulted in fewer disruptions in beliefs about the world, fewer PTSD symptoms, and less vicarious trauma. The use of behavioural disengagement

(reducing one's effort to deal with the stressor, or giving up the attempt to attain goals with which the stressor is interfering) was associated with higher symptom levels. Furthermore the results provide support for the argument forwarded by Folkman et al., (1986) which suggests that negative coping strategies are used when a specific situation is appraised as having to be accepted. This may indeed be the case amongst members of the CPU, who because of the nature of their work, feel powerless to effect change on behalf of their victim-clients. With regard to the association between positive and negative coping strategies, and intrusion and avoidance symptomatology, no significant relationships were found. The results of the present study contradict the findings of Schauben and Frazier (1995), which demonstrated significant negative correlations between the use of positive coping strategies and PTSD symptomatology.

## 15. Study limitations

The paucity of previous research focusing on the concept of vicarious traumatisation, particularly within the South African context, necessitated an exploratory study and as a result the findings should be viewed in this light. The current study did however provide strong support for the view that helpers can be adversely affected as a result of engaging in an empathic relationship with victim-clients.

It is however recognised that the present study has several limitations. Firstly, the lack of information regarding the control group may have resulted in unknown extraneous variables confounding the results. Secondly, the absence of a sample of normal controls precluded this study from establishing to what extent the CPU group deviates from the non-traumatised general population. Thirdly, the relatively small sample size implies that caution should be exercised in

generalising the results to members of the Child Protection Unit on a national level, or to helpers assisting victims of traumatic events in general.

## 16. Study implications

Notwithstanding the above-mentioned limitations, this study serves to highlight the extreme potential for psychological, emotional and interpersonal distress amongst police officials engaged in the investigation of sexual crimes against children, and in doing so, provides strong support for the construct of vicarious traumatisation. Moreover, the findings underscore the need for the urgent development and implementation of intervention strategies specifically designed to address the traumatic sequelae of providing services to primary victims. Furthermore, the study also emphasised the need for further empirical investigation of variables that may contribute to, or mitigate the process of vicarious traumatisation.

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