Vicarious traumatization: implications for the mental health of health workers?

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Abstract

It has been suggested that a unique feature of some mental health practitioners’ work is exposure through their role as therapists to clients’ descriptions of and reactions to trauma, and that these experiences may actually indirectly cause distress and traumatization to the therapist. This proposed phenomenon has been termed “vicarious traumatization” (VT) and is the focus of the current review. The concept of VT, together with other related concepts such as “burnout,” “compassion fatigue,” “secondary traumatic stress” (STS), and “work stress” are appraised. Psychological mechanisms that might be theoretically involved in VT are considered. The measurement of VT is reviewed alongside the limited research evidence supporting its existence. Factors such as direct trauma exposure and the personal attributes of mental health workers, which have been suggested to be associated with VT, are also assessed. It is concluded that the evidence to support the existence of VT is meager and inconsistent. Future research needs to be directed at distinguishing VT from other sources of distress arising within the workplace. Finally, the organizational relevance of VT and its possible implications for the management of mental health workers are critically appraised.

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1. Introduction

Healthier workplaces have been identified as part of recent government initiatives in the UK (Department of Health, 1998), with one of the aims being to “ensure that people are protected from the harm to their health that certain jobs can cause” (p. 51). The mental and physical health of UK National Health Service (NHS) staff has also recently been discussed in a government consultation paper (Department of Health, 1999), which highlights the importance of prioritizing good-quality working lives for NHS staff in aiming to provide good quality of care for patients. Similarly, in the United States and other countries around the world, occupational health projects are highlighted as important both for staff well-being, productivity, and performance (National Institute for Occupational Safety and Health [NIOSH], 1999). Research reported by NIOSH (1999) suggests that between 26% and 40% of workers find their jobs often stressful and the effects of work stress on health are well documented. People working in the caring professions are among the occupational groups identified as being at high risk of work stress (Smith, Brice, Collins, Matthews, & McNamara, 2000). Research on occupational stress in health service staff have found levels of stress and minor psychiatric disorder to be higher in the NHS than for other occupational groups in the UK (Borrill et al., 1998; Wall et al., 1997).

A number of explanations could be given for the high levels of staff stress and psychiatric disorder in health service staff and include aspects of organizations, job role, demands and characteristics (Borrill et al., 1998), workload (Wheeler, 1998), work environment (Briner, 2000), or individual personality characteristics (Zellars, Perrewe, & Hochwarter, 2000). It is possible that several of these general occupational factors combine to cause working in the health service to be inherently stressful (Leary et al., 1995) and could account for these findings. However, there may be specific aspects of working within a health service itself, such as the caring nature of the work, which could be involved in increasing staff stress. Such a role involves talking and listening to patients and carers, many of whom might be significantly distressed, as part of everyday work. Figley (1995a) has recognized this aspect of healthcare work and states, “There is a cost to caring. Professionals who listen to clients’ stories of fear, pain and suffering may feel similar fear, pain and suffering because they care” (p. 1). Therefore, it is likely that it is not just organizational or workplace factors that contribute to stress and ill health in healthcare workers, but also the aspects of the type of work that they are required to do.

Unfortunately, few data exist relating work stress to either the nature of the caring role or the characteristics of the care groups looked after and their clinical problems. For example, Melchior, Bours, Schmitz, and Wittich (1997) conducted a meta-analysis of variables related to burnout in psychiatric nursing and noted the lack of studies that looked at the impact of working with certain groups of patients. Staff stress studies often group staff in terms of their profession (Wall et al., 1997) or location (Carson, Leary, de Villiers, Fagin, & Radmull, 1995) when assessing mental health or burnout, without taking into account the types of patients or client groups the staff work with. An exception to this is where staff groups have been exposed either to death and dying (Wheeler, 1998) or to emergency situations and trauma generally (Figley, 1995a). With respect to the latter, considerable evidence exists (e.g.,
Hodgkinson & Stewart, 1991) to indicate that emergency services personnel may be traumatized due to the nature of their work, particularly following a major traumatic incident. Alexander and Atcheson (1998) found that 48% of nursing and medical staff from departments dealing with physical trauma (accident and emergency, intensive treatment, orthopaedic, and plastic surgery units) experienced emotional difficulties due to work. Moreover, it is also possible that healthcare workers who deal with the emotional aftereffects of traumatic experiences may also be affected negatively, and it is this issue that forms the focus of this review.

The DSM-IV diagnostic criteria for posttraumatic stress disorder (PTSD) acknowledges that learning about traumatic events experienced by a family member or a close friend can in itself lead to symptoms of PTSD (American Psychiatric Association, 1994, p. 424). Similarly, some have argued that such symptoms might also arise in therapists exposed to narratives of traumatic events. The potential adverse impact of working directly with clients who have histories of trauma (including sexual and physical abuse, experiences of military combat, and single traumatic incidents) has been discussed within the psychological literature for at least two decades, using a wide number of definitions and concepts. These terms include “burnout,” “compassion fatigue,” “secondary traumatic stress” (STS), and, more recently, “vicarious traumatization” (VT). Many of these terms have also been used interchangeably. In this review, VT has been broadly defined and encompasses the concept of “secondary traumatization/traumatic stress.” The term “trauma work” is used to describe working with clients who have experienced traumatic events (both physical and psychological) and have subsequent psychological difficulties.

There have been claims of wide-ranging and potentially severe consequences of VT, with authors such as Pearlman and Saakvitne (1995a) asserting that “the effects of vicarious traumatization are widespread; its costs are immeasurable” (p. 281), and suggesting that “Vicarious traumatization can affect anyone who engages empathically with trauma survivors—journalists, police, emergency room personnel, shelter staff, prison guards, clergy, attorneys, researchers etc.” (p. 281). Statements such as this have been taken very seriously and resulted in a number of publications discussing the impact of VT (e.g., Blair & Ramones, 1996; Clark & Gioro, 1998; Neumann & Gamble, 1995; Sexton, 1999; Stamm, 1997) along with self-help books and chapters for professionals who experience it (Herbert & Wetmore, 1999; Saakvitne & Pearlman, 1996). In contrast, the evidence base to support either the existence or prevalence of VT is modest, to say the least, and will be reviewed later. Similarly, few studies have examined the construct validity of VT and associated concepts (Jenkins & Baird, 2002). Accordingly, it might be argued that the prominence given to VT may be premature and not supported by the evidence.

Lessons learnt from the literature surrounding “psychological debriefing” following traumatic events suggest the importance of accumulating and critically evaluating a body of research evidence before devising interventions to treat or prevent it (Rose, Bisson, & Wessley, 2002). Concerned organisations implemented debriefing programs for a range of different types of traumas before there was sufficient robust research evidence for the effectiveness of this treatment (Raphael, Meldrum, & McFarlane, 1995; Rose et al., 2002). When randomized controlled trials were carried out, there was little consistent evidence for
debriefing reducing later PTSD (Rose et al., 2002) and some evidence that debriefing may actually be more harmful than helpful (Bisson, Jenkins, Alexander, & Bannister, 1997; Hobbs, Mayou, Harrison, & Worlock, 1996). Drawing on this experience, we therefore realize the importance of assessing the evidence for VT before implementing training programs or organizational schemes to address it.

Even if the existence of VT can be established, the question remains whether we need a new construct to describe these various symptoms of distress arising from involvement in trauma work. Although it is possible that VT could be a very important factor in the well-being of health service staff, it is also possible that the effects reported could be generally related to the demands of a stressful job and therefore the action needed to address this may be different. Moreover, it has been argued controversially that PTSD itself might best be conceptualized as socially constructed rather than psychopathological (Summerfield, 2001), and that psychological debriefing may “medicalise” normal distress (Rose et al., 2002). VT, therefore, might also be seen as an unhelpful and inappropriate pathological descriptor for normal distress that arises from hearing traumatic material while fulfilling a caring role. To label this distress as PTSD-related symptoms might also further stretch the diagnostic limits regarding PTSD and the requirement that, generally, individuals need to be exposed directly to trauma. This review, therefore, will attempt to disentangle VT and its proposed PTSD symptoms from alternative explanations involving normal distress to trauma and occupational stress arising within the workplace. The search strategy for the review was restricted to papers published in journals,1 peer-reviewed e-journals, and books. There were also a number of dissertations and theses that are related to VT and STS, but these have been excluded.2

2. Definition and concepts

The term “vicarious traumatization” is attributed to McCann and Pearlman (1990), who identified that working with trauma victims may cause severe and lasting psychological effects. Pearlman and Saakvitne (1995a) suggest that it is a cumulative process “through which the therapists’ inner experience is negatively transformed through empathic engagement with clients’ trauma material” (p. 279). It is suggested that VT can lead to changes in both self- and professional identity, one’s view of the world, spirituality, self-capacities and abilities, and psychological needs and beliefs, particularly relating to safety, trust, esteem, intimacy, and control (Saakvitne & Pearlman, 1996). Disruptions in the sensory system may also occur and lead to imagery intrusions, bodily sensations, and other sensory reactions (Pearlman & Saakvitne, 1995a). A wide range of other symptoms and psychological reactions have also been suggested to result from VT, including PTSD itself (Blair & Ramones, 1996).

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1 The terms “vicarious traumatization,” “vicarious trauma,” “secondary traumatic stress,” “secondary trauma,” “compassion fatigue,” and “trauma work” were entered into the PsychLit, Psychinfo, Medline, Embase, and PILOTS databases. These terms were also used to search the Internet, and included where appropriate e-journals, which are peer reviewed.

2 A bibliography of dissertations is available from the first author.
Due to confusion over the terms used to describe the effects of trauma work, several authors have attempted to distinguish between the concepts of VT, compassion fatigue, STS, and burnout, all of which have been used to describe the effects of working with trauma survivors (e.g., Jenkins & Baird, 2002). Whilst there is overlap between these concepts, there are also identifiable differences. Compassion fatigue and STS are terms that Figley (1995a) suggests can be substituted for each other. These focus on the symptoms and emotional responses resulting from work with trauma survivors but do not take into account the specific cognitive changes that VT definitions emphasize. However, this concept has become less well defined, as a number of authors have used the term secondary traumatic stress but also discussed cognitive aspects of the effects of working with trauma, and others have discussed VT while focusing totally on symptomatology. Hence, it is now difficult to distinguish these terms from one another in the research literature.

Burnout occurs as a result of prolonged work, and focuses on symptoms of emotional exhaustion resulting from job strain, erosion of idealism, and a reduced sense of accomplishment and achievement (Figley, 1995a; Maslach, 1982). It is said to be a gradual process and results from occupational stress, causing exhaustion, whereas Figley (1995b) suggests that STS can be sudden and without warning, and is related more to the traumas experienced by clients or significant others rather than occupational stress itself. Burnout and compassion fatigue can occur with any type of client work, whereas STS and VT are specific to work with trauma survivors (for further discussion of these concepts, see Blair & Ramones, 1996; Figley, 1995a, 1995b; Jenkins & Baird, 2002; McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995a). Compared to the concepts discussed above, VT places more emphasis on changes in meanings, beliefs, schemas, and adaptation although still acknowledging subclinical levels of trauma symptoms. Jenkins and Baird (2002) have usefully begun to assess the components that differentiate VT and STS from each other (e.g., the emphasis on emotional and social vs. cognitive symptomatology), and those that differentiate VT and STS from burnout (i.e., psychological trauma symptoms). However, further research to define the boundaries of the concept of VT in relation to other terms is needed.

From the above consideration of the definitions and descriptions of these wide-ranging phenomena, there appears to be confusion and overlap between them. We would like to redefine what we consider the most important elements associated with these concepts:

1. cognitive, emotional, behavioural, and physical responses, which might be considered as a normal response to hearing traumatic material;
2. symptomatic responses, which might be considered as extreme versions of the responses described in 1;
3. cognitive changes in beliefs and attitudes; and
4. additional effects on interpersonal and occupational functioning.

These effects may occur in the short or long term. This review will consider the evidence for each of these four areas of potential effects of trauma work.
3. Theoretical explanations

If an assumption is made that some form of VT might exist, it is useful to briefly consider the psychological mechanisms that might be involved by looking at aspects of the therapeutic interaction. Empathic engagement with traumatized clients may involve the therapist being exposed to graphic details, including reenactment of the trauma. The therapist also becomes a witness to the fact that humans can be intentionally cruel to one another. Hypotheses from wide-ranging theoretical backgrounds have been offered to explain how aspects of this work could lead to fundamental changes in the trauma worker. However, just as the concepts used to describe VT overlap, there is also overlap between the processes that have been suggested to explain how it might occur. These include countertransference, empathy, emotional contagion, and cognitive theories of beliefs and schemas.

3.1. Countertransference

Countertransference has been one of the most commonly offered explanations of how VT might occur (e.g., Blair & Ramones, 1996; Pearlman & Saakvitne, 1995a). The concept of countertransference in itself is subject to debate about its meaning and components. However, most meanings of countertransference involve the therapist experiencing strong responses within the psychotherapeutic relationship in relation to the client. This can include emotional and behavioural responses (both conscious and unconscious) to the patient, the material they bring to therapy, reenactments, and transference (Gabbard, 2001; Norcross, 2001; Pearlman & Saakvitne, 1995a). Herman (1992) reports that traumatic countertransference can include a range of emotional reactions to trauma survivors, such as identifying with their helplessness, grief, personal vulnerability, and rage. Unless these are understood and contained, they could lead to longer term personal, therapeutic, and professional effects. Blair and Ramones (1996), Pearlman and Saakvitne (1995a), and Wilson and Lindy (1994) offer detailed discussions of countertransference and its relationship to VT. It is suggested that the two processes are different but interact with each other. Countertransference describes experiences that take place within a therapeutic relationship whereas VT relates to changes taking place in the whole of the therapist’s life, including their belief system. Pearlman and Saakvitne (1995a) give detailed discussion to the interaction between the two processes. They suggest that unacknowledged countertransference can leave the therapist vulnerable to VT. Likewise, they suggest that VT can leave the therapist vulnerable to stronger countertransference reactions. Processes suggested to be involved in the interaction between VT and countertransference are decreased self-awareness, increased defenses, challenge and change to the therapist’s own identity, decreased self-protectiveness, challenges to beliefs, and world view. Dynamics that are perhaps more common in therapy with survivors of abuse, such as victim–perpetrator/abuser–rescuer dynamics (Courtois, 1988), may also render the therapist more vulnerable to VT. Therapists whose clients see them in the “abuser” role may find the associated feelings contradictory to their self-identity and therefore difficult to cope with (Catherall, 1991). This may be a particular risk for new or unsupervised therapists (Neumann & Gamble, 1995). In summary, while countertransference processes may play a part in leaving the therapist
vulnerable to VT and vice versa (Pearlman & Saakvitne, 1995a), the two processes are different, with VT not being limited to the therapeutic relationship and being more generalised to affect the therapist’s life.

3.2. Empathy

Another aspect of the therapeutic relationship suggested to be involved in VT is empathy. Rogers (1980) described empathy as one of the necessary aspects of a therapeutic relationship, with the primary aim of effecting therapeutic change, and it is viewed by diverse therapies as an essential component of therapeutic contexts (Reynolds & Scott, 1999), particularly when working with clients relating to childhood sexual abuse (Paivio & Laurent, 2001). By definition, VT occurs via empathic engagement with clients’ traumatic material (Pearlman & Maclan, 1995; Pearlman & Saakvitne, 1995a). It is suggested that there are four aspects of empathy, which interact with each other: the time frames of past and present and cognitive empathy and affective empathy (Pearlman & Saakvitne, 1995a). During therapy with adult survivors of childhood sexual abuse, the therapist may empathically connect with the overwhelming feelings of an abused child to assist the adult survivor in understanding their abuse in a developmental context. This is the domain of past affective empathy and this is where the therapist may be most vulnerable to VT (Pearlman & Saakvitne, 1995a) as the overwhelming feelings may challenge the therapist’s view of themselves and the world. Figley (1995b) notes that empathy is a major resource for those trying to help traumatized clients: “The process of empathizing with a traumatized person helps us understand that person’s experience of being traumatized, but in the process we may be traumatized as well” (p. 20). This may explain why emergency workers such as paramedics score low on empathy measures (Grevin, 1996) and use avoidance strategies to cope with their work (Young & Cooper, 1999), as not engaging empathically with trauma victims may be functional in enabling them to continue carrying out their work. It may be useful to study empathic engagement in more detail in relation to staff who work with the psychological aftermath of trauma. This would facilitate further understanding of the relationship between VT and empathy. Further discussion of empathy and its relationship to both traumatic counter-transference and VT can be found in the work of Wilson and Lindy (1994).

3.3. Emotional contagion

Whereas empathy relates to understanding the distress of another person, emotional contagion is the reflecting and experiencing of that distress, at a more unconscious level. An individual observes another person and then feels emotions which are parallel (Figley, 1995a), although this is not necessarily a conscious process. It has been suggested that emotional contagion is involved in the empathic process (Miller, Stiff, & Ellis, 1988) and is therefore relevant to therapeutic situations. In a meta-analysis, Joiner and Katz (1999) found evidence that emotions, particularly depression, can be “contagious” and passed from a person to a significant other, and discuss behavioural, cognitive, and interpersonal theories of depression to account for this observed effect. Research on other emotions, such as anxiety,
remains inconclusive, although early studies found evidence of emotional contagion (anxiety and other emotions) between patients and therapists (Donner & Schonfield, 1975). Hatfield, Cacioppo, and Rapson (1994) offer a detailed discussion of the evidence for and potential mechanisms involved in emotional contagion and conclude that in the natural tendency to mimic and synchronize with others, emotional experiences are involved and can lead to “catching” of emotions from other people. It is suggested that the knowledge that emotions are contagious can be valuable information in the therapy situation, particularly where there is incongruence between how the client reports they are feeling and how their posture and appearance suggests they are feeling. Therefore, the tendency to synchronize with others’ emotions can be a useful source of therapeutic information if it is monitored by the therapist. However, as lower self-awareness is suggested as a contributing factor to VT (Pearlman & Saakvitne, 1995a), it is perhaps at times when the therapist is less able to be self-aware that emotional contagion renders them more vulnerable to VT as they may experience these emotions as their own, which may be incongruent with their personal identity and beliefs. This may be where contagion processes interact with work-related stress, and Pearlman and Saakvitne (1995) suggest that stressors can lead to impaired personal resources and therefore lower self-awareness, which in turn, render the therapist more vulnerable to being affected by the client’s emotions.

3.4. Cognitive theories

Further theories of how VT may occur are more cognitively orientated. Just as clients’ views and beliefs about themselves and the world may change as a result of trauma (Janoff-Bulman, 1985), it is suggested that trauma workers’ views and beliefs may be changed by exposure to clients’ traumas. Cognitive theories suggest that schemas (or core beliefs) influence how the world is viewed and experienced by an individual. Any new experience is filtered through these schemas and either corresponds with the schema (assimilation) or the schema changes to incorporate the new information (accommodation) (Brewin, Dalgleish, & Joseph, 1996; Horowitz, 1986; Piaget, 1971). This is the process by which cognitive theories suggest that therapist’s schemas can be altered by the new information they hear from their traumatized clients, as the information about the trauma may not correspond with the therapist’s own beliefs or schemas. Therefore, the beliefs of the therapist may be changed to accommodate the new information.

McCann and Pearlman (1990) describe VT from the theoretical position of cognitive development or constructivism. They suggest that VT involves lasting alterations to cognitive systems or schemas, which have evolved to help the individual make sense of their world. The schemas include beliefs, assumptions, and expectations in relation to the self and the world. Cognitive theories of PTSD suggest that these schemas can be disrupted when trauma is experienced (for discussions, see Dalgleish, 1999; Litz & Roemer, 1996). Janoff-Bulman (1985) identifies three basic assumptions or beliefs that may be particularly affected by trauma: the belief that oneself is invulnerable, the view of oneself as positive, and the belief in a meaningful and just world. McCann and Pearlman suggest that working with trauma survivors exposes the therapist to abuses of trust, lack of safety, and powerlessness felt by
trauma victims, and as this new information is assimilated into the therapist’s experience, disruptions in the therapist’s schemas about the world may occur. Pearlman and Saakvitne (1995a) give a detailed account of how trauma work in particular can cause disruption in the therapist’s schemas of self-identity, world view, spirituality, and other basic psychological needs in terms of constructivist self-development theory.

Cognitive theories of memory processes in PTSD have added to the discussion of VT. Theories of traumatic memory processes have become a focus of discussion and research, demanded by the legal and political climate surrounding the debate over recovered memories/false memories (Critchlow, 1998; DelMonte, 2000). In relation to VT, McCann and Pearlman (1990) discuss how a previously neutral object can trigger the therapist to have images or flashbacks relevant to clients’ traumatic experiences. The client may have discussed with the therapist an aspect of their traumatic experience that relates to an object and when the therapist encounters the object in another context, it acts as a memory cue and triggers the memory of the client’s trauma. The object becomes associated with traumatic experiences in the therapist’s memory system. Blair and Ramones (1996) discuss how connectionist (network) models of memory processes suggest that “thinking, imaging, remembering and other mental processes are not separate from each other” (p. 28) within memory. Therefore, an image that is generated in thinking about something can later be experienced as a real memory. Therefore, if a therapist generates an image while listening to a client’s traumatic experiences, this image could reemerge later as a flashback or memory. More recently, new cognitive theories of the organization of trauma memory systems have emerged (e.g., Brewin et al., 1996) and are described by Dalgleish (1999). Ehlers and Clark (2000) propose a cognitive model of persistent PTSD, which suggests that it is the perceived presence of current threat that leads to chronic PTSD. In relation to VT, a therapist who continues to work with traumatized clients is highly likely to be exposed to further trauma material and so the threat of further traumatization is ongoing. However, Ehlers and Clark also place importance on the appraisal of events, the nature of trauma memories, and the strategies used to control either perceived threats or symptoms. This could suggest that a trauma worker’s appraisals of the current situation, in particular their appraisal of their responses to trauma material, and also their coping strategies may influence how much they are affected by working with traumatic material. Future research in VT is needed to assess whether these more recent theories might offer further cognitive explanations of the processes involved.

3.5. Other factors that may contribute to VT

Pearlman and Saakvitne (1995a) also acknowledge the part played by work factors that are not exclusive to trauma therapy, such as organizational context (setting, colleagues, caseload, supervision, and services available to clients), social and professional climate, financial climate of the organization, and the wider health care system. Saakvitne and Pearlman (1996) suggest a number of contributing factors in their definition of VT, although a robust evidence base does not necessarily support these. These include aspects of the individual (e.g., coping mechanisms, personal history, and current life context) and the situation within which they
work (e.g., type of work, organizational, and wider context). The current personal and professional circumstances of the therapist and past trauma history are also suggested as vulnerability factors in VT. It could also be hypothesized that employees who received regular supervision with the opportunity to address their responses to clients’ traumas may be less vulnerable to VT, although Kassam-Adams (1995) did not find level of support and supervision to be related to PTSD symptoms in trauma workers.

Another potential factor that could contribute to VT is the reenacting of abuse dynamics such as dominance and submission within staff teams who work with survivors of child sexual abuse. Richardson (1999) suggests that in the same way that the individual therapist can be drawn into unconscious reenactment of the dynamics of abuse, organizations can become “trapped in conflict and defensive re-enactments of abuse” (p. 134). Sexton (1999) similarly suggests that organizations can also be affected by VT. Unconscious reenactments of abuse dynamics could be an effect of VT rather than a cause. It seems that a number of factors may be involved and affected by VT and further research is needed to identify the interactions and relationships between them.

4. The measurement of VT

In most studies to date, VT has been measured by questionnaire. These usually target symptoms and beliefs, although other scales are sometimes included to test specific hypotheses or to compare VT with other concepts, such as burnout, usually measured by the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1986). The most common measures of PTSD symptoms that have been used in VT research are the Impact of Event Scale (IES) (Horowitz, Wilner, & Alvarez, 1979) and the Trauma Symptom Checklist-40 (Elliott & Briere, 1992). Some studies have employed more general measures of symptomatology and well-being, such as the Symptom Checklist-90-Revised (SCL-90-R) (Derogatis, 1983) and the Brief Symptom Inventory (Derogatis, 1993). The appropriateness of the use of these measures is further discussed later in this review. Specific measures for VT have also been developed and include the Traumatic Stress Institute (TSI) Belief Scale (Pearlman, Maclan, Johnson, & Mas, 1992) to assess disruption in beliefs. The 10 subscales are designed to measure disrupted beliefs in relation to self and others in the following areas: safety, trust/dependence, esteem, intimacy, and control. Figley (1995a) has also developed the Compassion Fatigue Self-Test for Practitioners (CFST), which has two subscales measuring compassion fatigue and burnout. A recent study (Jenkins & Baird, 2002) has assessed the validity of these two questionnaires in relation to each other, and to the MBI and SCL-90-R in a sample of sexual assault and domestic violence counsellors. They found the TSI Belief Scale and CFST to have good concurrent validity, and also moderate convergence with, but also discrimination from, burnout (MBI). They also found that both also correlated with general distress (SCL-90-R) but had adequate independent shared variance. Other authors have designed their own beliefs scales (e.g., Johnson & Hunter, 1997) or begun to develop questionnaires specifically to measure STS (Motta, Kefer, Hertz, & Hafeez, 1999). This is a 20-item scale in development, which is derived
from the DSM-IV (American Psychiatric Association, 1994) criteria for PTSD and Figley’s (1995a) CFST and is designed for use with therapists and families of trauma survivors. In summary, a variety of trauma-specific questionnaires, together with more general measures of symptomatology and well-being have been employed in studies of VT and secondary traumatization. We will critically appraise the methodological issues surrounding these measures later within the review.

More recently, some researchers have used qualitative methods, such as phenomeno- logical analysis, to investigate VT (Iliffe & Steed, 2000; Steed & Downing, 1998). These studies have provided valuable evidence in addition to the questionnaire-based studies. However, the findings of the qualitative and quantitative studies show discrepancies. This is discussed later.

5. Research evidence relating to VT

Although much has been written about the effects of VT, the number of empirical studies from which this literature is derived is small, and described as being “based on the anecdotal experiences of therapists” (Sexton, 1999, p. 396). As with the development of research into PTSD, much of the earlier literature arose from therapists’ experiences of working with war veterans (Haley, 1974; Lindy, 1988), which also found that families of war veterans with PTSD may display similar symptoms to the veteran themselves (Baranowsky, Young, Johnson-Douglas, Williams-Keeler, & McCarrey, 1998). Similarly, adult children of holocaust survivors are more likely to experience PTSD during their lifetime than a comparison group (Yehuda, Schmeidler, Wainberg, Binder-Brynes, & Duvdevani, 1998). Before the term VT was used, researchers such as Danieli (1988) investigated the emotional responses of psychotherapists working with holocaust survivors and found a range of emotional reactions to hearing survivors’ stories. These were labelled “countertransference themes” and included guilt, rage, shame, dread and horror, grief and mourning, and inability to contain intense emotions. A number of defense mechanisms within the psychotherapists were identified, including avoidance, denial, and clinging to the professional role. However, until recently, it was unclear as to how these findings related to working with other traumatized populations, as there were only a few qualitative studies carried out (Iliffe & Steed, 2000; Steed & Downing, 1998).

This review will describe the evidence for VT in trauma workers as measured by symptomatic distress and disrupted beliefs. Firstly, the research evidence for a negative impact of trauma work on both symptoms and beliefs will be described. Secondly, the factors that are associated with trauma symptoms, other symptoms, and disrupted beliefs in trauma workers will be discussed.

5.1. The evidence for VT in trauma workers

Research evidence for VT is inconsistent and has a number of discrepancies. Table 1 shows a summary of the published research findings, sample size, and measures used.
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<td>Mental health professionals and police officers recruited by mail-out to all staff within one state</td>
<td>Lower trauma symptoms and psychological distress in mental health professionals than police officers. Distress was not associated with a higher percentage of sexual abuse cases.</td>
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<td>Chrestman (1995)</td>
<td>IES, TSC, WAS, BCC (modified)</td>
<td>No info available</td>
<td>Therapists recruited by mail via membership of professional organizations</td>
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</tr>
<tr>
<td>Kassam-Adams (1995)</td>
<td>PSQ, IES</td>
<td>100</td>
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<td>Johnson and Hunter (1997)</td>
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<td>Crothers (1995)</td>
<td>Interviewed staff</td>
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<td>Staff members in a unit treating traumatized patients</td>
<td>Reports a number of quotes suggesting effects on home life, work, families, attitudes about the world, and leisure time. No formal analysis carried out. Affective responses to hearing clients' traumatic material most commonly reported. Outside the therapeutic session, negative physiological, emotional, and cognitive effects reported, as well as some positive effects. All therapists reported negative effects of working with traumatized clients.</td>
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Benatar (2000) Open-ended interviews 12—10 female, 2 male Trauma therapists with at least 7 years experience. Six had personal history of child sexual abuse, six did not. Five themes in relation to VT emerged: negative change in world view, altered sense of safety, changed relationship to work, and negative change in relationship to self and with others. No notable difference between those with and without personal abuse history. Also themes relating to positive self-transformation: empowerment, wisdom, improving work with other clients, validation and personal healing, and becoming advocate/activist.

Iliffe and Steed (2000) Semistructured interviews 13 female, 5 male Domestic violence counsellors Themes emerging relating to personal impact of hearing trauma material include shock and horror, visual imagery, physical reactions, and symptoms, feelings of anger, changes to cognitive schemas relating to safety, trust, and power in particular.

TRQ = Therapist Response Questionnaire; LERQ = Law Enforcement Response Questionnaire; TSC-40 = Trauma Symptom Checklist-40; BSI = Brief Symptom Inventory; MBI = Maslach Burnout Inventory; SCL-90-R = Symptom Checklist-90-Revised; PSQ = Personal Strain Questionnaire; TSC = Trauma Symptom Checklist; WAS = World Assumptions Scale; BCC = Behaviour Change Checklist; WOC = Ways of Coping Scale; CS/FT = Compassion Satisfaction/Fatigue Test; WTDS = Workplace Trauma Debriefers Scale; TSS = Traumatic Stress Schedule; CSQ = Crisis Support Questionnaire; OLQ = Orientations to Life Questionnaire; CFST = Compassion Fatigue Self-Test for Psychotherapists.

a Ortlepp and Friedman (2002) and Schauben and Frazier (1995) also had qualitative elements in addition to the quantitative focus of the study.
5.1.1. Quantitative research

One of the earlier studies of VT found no evidence that mental health professionals were significantly affected by their trauma work (Follette et al., 1994). Lower levels of trauma symptoms and psychological distress were found in mental health professionals than police officers. None of the measures of distress were associated with percentage of sexual abuse survivors in the caseload for either profession. Variables that did predict higher PTSD scores will be discussed later. These findings are also supported by a recent study (Baird & Jenkins, in press), which found that exposure to trauma clients was not related to vicarious trauma, STS, or general distress. Those who saw more clients actually had fewer vicarious trauma symptoms.

Perhaps the two most quoted studies in the area of VT are those of Schauben and Frazier (1995) and Pearlman and Maclan (1995). These two studies have been used by many authors as the main sources of evidence for VT in trauma therapists. Schauben and Frazier found significant correlations between the percentage of sexual violence survivors in counsellors’ caseloads and symptoms of PTSD, self-reported VT, and disruption in beliefs (particularly related to the “goodness of other people”—other esteem). Although these findings were significant, the correlations were weak (all correlations were between .16 and .27). However, the researchers did not use complete scales to measure beliefs, using only five subscales from the TSI Belief Scale, which were chosen “because these beliefs seemed most likely to be affected by working with sexual violence survivors” (p. 52). The checklist used to determine PTSD symptoms was devised by the authors and had an alpha coefficient of .62, suggesting limited internal consistency. Self-reported VT was measured by presenting participants with a definition and then asking them to rate on a 5-point scale whether they were experiencing vicarious trauma. Therefore, with low correlations and nonstandardised measures, it is difficult to be conclusive over the effects of working with survivors of sexual violence from this study.

Pearlman and Maclan (1995) studied the effects of working with trauma in self-identified trauma therapists who volunteered to take part in a study “looking at the effects of trauma work.” The IES was completed in relation to clients’ trauma material. Only one measure significantly correlated with percentage of trauma survivors in the caseload, which was the Self-trust subscale on the TSI Belief Scale ($r = –.22$). The negative correlation actually suggests that a higher proportion of survivors on the therapist’s caseload was related to less disruption in beliefs (i.e., opposite to that predicted). Length of time working with trauma was an important variable, as it correlated with Self-trust, Self-intimacy and Self-esteem subscales (TSI Belief Scale), and total score on the SCL-90-R. All correlations were weak and negative, ranging from $–.14$ to $–.20$, but suggested that therapists who are newer to the work had more disrupted beliefs in the specified areas and higher symptom levels. Further analyses, which will be discussed later, suggested that there were also differences between those therapists who had personal trauma histories and those who did not.

Other studies of VT in trauma therapists have also had mixed results. Chrestman (1995) found that secondary exposure to trauma in trauma therapists was associated with increased scores on the IES and its subscales, and with increased dissociation and sleep disturbance on the Trauma Symptom Checklist. However, as there are no data reported by the author,
including sample size information, it is difficult to assess the strength of these associations and how representative the results are. Kassam-Adams (1995) found that scores on the IES correlated with percentage of sexual trauma in the caseload for both recent exposure ($r = .26$) and for exposure during the whole of the career ($r = .36$). Again, the correlations are not strong. She states that nearly half of the therapists scored in the “high” range on the IES, although this is not defined. Knight (1997) surveyed mental health professionals specializing in working with adult survivors of child sexual abuse, asking them to rate their agreement with several statements relating to negative reactions to working with traumatized clients. She found that feelings of being overwhelmed by the work and vulnerability in personal relationships were most often agreed with. Reactions such as anger, sadness, horror, and fantasies of rescue were the most common. However, Knight herself acknowledges difficulties concerning the questionnaire used and the selection of participants. In particular, the statements were constructed using anecdotal evidence and participants were asked to rate on a 4-point scale the extent of their agreement or disagreement. The inclusiveness, reliability, and validity of the findings are questioned, and therefore the generalisability of the results is uncertain.

Johnson and Hunter (1997) compared sexual assault counsellors with counsellors in other areas. They found that the trauma counsellors scored higher on emotional exhaustion, using the MBI. However, since the MBI was the measure of symptomatology, it can also be argued that they were measuring burnout and not VT. Accordingly, they devised a “beliefs and values” scale to particularly assess this aspect of VT. The two groups were not compared directly on this measure, but it was correlated with other scores within the groups. The Emotional Exhaustion subscale correlated significantly with factors named “intimacy” (which relates to the counsellors’ relationships with significant others outside work) and “power” (relating to the counsellors’ attitude to people and agencies perceived to be powerful and controlling) on the beliefs scale. However, the results of this study are difficult to interpret, as the beliefs scale is not standardised. The comparison between the two staff groups suggest that working with sexual assault victims is particularly stressful and can lead to higher rates of burnout. It is possible that beliefs regarding intimate relationships and powerful bodies may be affected by the burnout itself and not as a direct result of the job. It is therefore unclear whether this study provides evidence for VT.

More recently, in a study of child-protection workers, Cornille and Meyers (1999) found that a significant number of staff scored above psychiatric outpatient means on the Brief Symptom Inventory and its subscales. Mean scores for the whole of their sample were significantly higher than nonpatient norms. They suggest that this provides evidence for STS in child protection workers. However, elevated scores on the BSI and IES-R were not associated with greater exposure to traumatic material or number of trauma clients. Number of assaults experienced at work was most predictive of scores and therefore may suggest that the questionnaires measured PTSD in response to workers’ own and not secondary trauma. Brady et al. (1999) found evidence of higher PTSD symptoms in workers with more cumulative exposure to sexual abuse clients, as measured by ranked scores on the IES. This finding does suggest that there may be secondary trauma effects from working with traumatized clients, particularly in relation to symptomatology. However, TSI Belief Scale
scores were not associated with greater exposure, providing no evidence for the cognitive aspects of VT. Ortlepp and Friedman (2002) studied lay trauma counsellors and found that although they reported symptoms of STS initially following a counselling debriefing session, the symptoms reduced within a week. They found low levels of STS symptoms generally.

5.1.2. Qualitative studies

Prior to the definition of VT or STS, Danieli’s (1988) qualitative work on counter-transference identified emotional reactions to working with Holocaust victims. Schauben and Frazier (1995) included two open-ended questions within their quantitative research, where participants were asked to list the five most difficult and most enjoyable aspects of their work with trauma clients. The three most common themes of difficulties related to specific aspects of the work (such as setting boundaries, difficulty establishing trust, length of process, and dealing with client emotions about the abuse) and systemic issues. The fourth aspect related to difficulties dealing with counsellors’ own emotions relating to the abuse (anger, sadness, fear, helplessness, and powerlessness). Fewer counsellors mentioned other negative effects on themselves, such as changes in beliefs. Enjoyable aspects related to positive aspects of the healing process, importance of the work, and the work environment.

Crothers (1995) interviewed members of her staff team and reports a number of quotes, as do Saakvitne and Pearlman (1996), but there are no formal analyses and so it is difficult to assess how representative and generalisable they are. However, the quotes do appear to report issues similar to those found by more recent qualitative studies. Steed and Downing (1998) interviewed female therapists working with sexual assault and abuse. Thematic-content analysis revealed a number of negative effects of working with trauma survivors, as well as positive effects. All therapists reported some negative effects, including affective responses (such as anger, pain, frustration, sadness, shock, horror, and distress) and physical effects on energy, sleep, and somatic complaints. Around two thirds of the participants reported intrusive imagery, dreams, and thoughts, as well as increased vigilance related to safety of themselves and others, and difficulties with trust. When specifically asked about cognitive changes, loss of faith in others, increased feelings of vulnerability, and changes in their own identity were the most frequently reported effects. Positive effects of this work were also reported, relating to having a clearer and more positive self-identity, and a greater appreciation of clients and their strengths. It is suggested that positive effects may also relate to an increased questioning of life and values.

Iliffe and Steed (2000) carried out semistructured interviews with domestic violence counsellors and found that they reported symptoms of VT, particularly changes in cognitive schemas. These were most evident in areas of safety (feeling less secure in the world), world view (more aware of power and control issues), trust (some reported that they treated people more warily), and gender power issues (increased sensitivity to these issues). Symptoms of burnout, feelings such as anger, shock, and horror during sessions, and physical reactions/symptoms during and after sessions were also reported by this sample of workers. It is possible that some aspects of this, such as gender power issues, may be particularly relevant for this group of workers, as this is a pertinent issue relating to domestic violence. However, this research does suggest that trauma workers notice changes in themselves in terms of both
symptoms and beliefs, which they attribute to trauma work. Benatar (2000) identified five themes relating to VT from open-ended interviews with experienced trauma therapists. Therapists felt that trauma work had led to a more negative, cynical, and pessimistic view of the world, concerns about safety, changes in how they felt about their work life, negative changes in the relationship with self, and isolation from others. There were no notable differences between those who had a history of childhood abuse and those who had no abuse history. It should be noted that Benatar also found themes relating to positive changes because of trauma work. Ortlepp and Friedman (2002) also had a qualitative aspect to their research and found that lay trauma counsellors reported lasting changes in beliefs about themselves, the world, and others, which they felt were triggered by their experiences of trauma work.

In summary, the evidence to support the concepts of VT and secondary trauma is meager and inconsistent, relying on small and variable correlations between symptomatic distress and trauma exposure. The relationship between exposure and altered cognitions and beliefs is even less robust. These quantitative findings starkly contrast with the certainty and conviction of those who write about the effects of working with trauma. Nevertheless, the findings from qualitative studies provide more support for the definition and suggested effects of VT than the quantitative studies. There are clearly a number of important difficulties surrounding the research methods, instruments, and selection of participants within the studies of VT, which may be largely responsible for the inconsistency in the results. These methodological issues are reviewed later in more detail.

5.2. Other factors associated with PTSD and symptoms in trauma workers

Although the research has generally not found strong evidence for VT associated with exposure to trauma cases, a number of studies carried out further statistical analyses to try and determine other factors that are associated with higher levels of PTSD symptoms and disrupted beliefs in mental health workers.

5.2.1. Personal characteristics

Personal trauma history has been identified by some studies as an important variable in predicting PTSD symptoms and poor mental health in trauma workers. Trauma history has been found to be a significant predictor of scores on the SCL-90 (Pearlman & Maclan, 1995) and PTSD symptoms as measured by the IES (Kassam-Adams, 1995). Interpersonal trauma history has been found to be related to compassion fatigue, as measured by the CFST (Jenkins & Baird, 2002). Childhood experience of trauma or abuse has also been found to be strongly associated with PTSD symptoms in therapists (Follette et al., 1994; Kassam-Adams, 1995). Pearlman and Maclan (1995) found trauma history to be such a strong variable that they divided the participants into two subsamples based on this. They found significant differences on the IES, SCL-90, and five subscales of the TSI Belief Scale, with the trauma-history group yielding consistently higher scores. In research by Steed and Downing (1998), memories of a personal experience being triggered were a factor in negative responses to the work. However, Schauben and Frazier (1995) did not find trauma history to significantly interact with caseload characteristics in producing symptoms in trauma workers. It is possible that the
impact of a personal history of trauma may relate to the extent to which the individual has dealt with their own trauma, and there are no published studies, which have assessed this aspect specifically. Further research is therefore needed to assess the specific interactions between past history and effects of the work.

Other personal factors that have been associated with higher levels of symptoms are negative coping strategies, level of personal stress, and negative responses to sexual abuse cases (Follette et al., 1994). Gender has also been identified as a potentially important factor, with women reporting higher levels of symptoms than men do on the IES (Cornille & Meyers, 1999; Kassam-Adams, 1995). These factors are consistent with recent reviews of potential risk factors for developing PTSD (Brewin, Andrews, & Valentines, 2000; Halligan & Yehuda, 2000) and have examined personal characteristics such as past psychiatric history, history of childhood abuse or general childhood adversity, lower intellectual functioning, and family psychiatric history. Although previous trauma history has been a focus of VT research, future research might assess whether these other factors also predict VT in trauma workers.

5.2.2. Work characteristics

A number of work-related factors have also been associated with higher symptoms in trauma workers. As discussed earlier, some studies have found that percentage of trauma survivors within the caseload was associated with higher levels of trauma and other symptoms (e.g., Schauben & Frazier, 1995). Brady et al. (1999) found that exposure to clients’ traumas as measured by other variables (e.g., number of hours spent with survivors, level of exposure to graphic details) was also associated with higher IES scores. Work factors other than those related to traumatized clients may also influence levels of symptomatology. Cornille and Meyers (1999) found that the number of assaults experienced while working was associated with total score on the BSI and the IES Intrusion subscale, and number of working hours was associated with the IES Avoidance subscale. However, Kassam-Adams (1995) found that workplace characteristics, such as availability of supervision and support, were not related to level of PTSD symptoms in the worker. Surprisingly the effect of further training in trauma work has not been assessed by any of the main studies of VT.

5.2.3. Summary

In summary, a number of factors may contribute to PTSD and other symptoms in staff who work with traumatized clients. These may be both personal and work related, and perhaps interact with each other. This is suggested by the weak correlations and the fact that multiple regression models only predict small percentages of the variance. It is also difficult to distinguish how much of the reported symptoms of distress could be attributed to the stressful nature of the job as opposed to being specifically related to working with traumatized clients. Further research is therefore needed to determine the nature of the interactions between these factors.

5.3. Factors associated with disrupted cognitions in trauma workers

The assessment of disruptions in beliefs, which is central to the definition of VT, has also yielded inconclusive results. Some studies did not consider disruptions in cognitions at all
(Cornille & Meyers, 1999; Follette et al., 1994), and others found that greater exposure to trauma clients was not associated with disrupted cognitions (Baird & Jenkins, in press; Brady et al., 1999). However, significant but weak correlations between percentage of trauma work and disrupted beliefs, particularly in the area of other esteem (beliefs that others are of value and worthy of respect) (Schauben & Frazier, 1995) have been found. A personal trauma history may play a part in the disruption of cognitions, with higher scores being associated with those who had experienced trauma directly themselves (Pearlman & Maclan, 1995). In this study, those with a trauma history who were newer to the work and who had no supervision had the highest TSI Belief Scale scores, indicating greater disruption in beliefs. Higher belief disruption in those without a trauma history was associated with less training, working in a clinic setting, and addressing the effects of their work in personal therapy (Pearlman & Maclan, 1995). Therefore, the evidence suggests that some workers experience disrupted beliefs and cognitions associated with their work, but this may interact with their own history of trauma and other personal and work-related factors. Although the disruption in cognitions is a central part of the definition and theory of VT (McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995a), the evidence for this is unclear, and where evidence for a disruption in beliefs has been found, it is possible that this may relate to or interact with factors other than the trauma work itself.

6. Methodological issues

A number of criticisms can be made generally of the methodology in VT research. Firstly, it is unclear whether the questionnaires used actually measure the concept of VT. Whereas the MBI (Maslach & Jackson, 1986) was designed specifically to assess the concept of burnout, there is as yet no one questionnaire that has been designed to measure the concept of VT as a whole. Pearlman (1996) suggests that the TSI Belief Scale measures disruptions in beliefs arising from vicarious exposure to trauma material and can be used in conjunction with other measures (e.g., the IES) to assess VT. However, Pearlman and Saakvitne (1995b) acknowledge that measures of VT are limited and as yet the “strongest assessment tool is our own ability to reflect on our experience” (p. 165). New measures are being developed to assess symptoms associated with responses to trauma work, such as the Secondary Trauma Questionnaire (Motta et al., 1999). Figley (1995a) has also developed the Compassion Fatigue Self-Test for Practitioners (Figley & Stamm, 1996), which measures responses to work, in particular trauma work. However, due to difficulties in distinguishing boundaries between the different concepts of VT, compassion fatigue, and burnout, these new questionnaires may only assess aspects of VT, but not the concept as a whole. However, studies such as Jenkins and Baird (2002) will assist in clarifying the specific aspects that such questionnaires measure and enable identification of factors and overlaps within each concept.

The use of other standardised measures to assess the symptom distress of VT is also problematic. Given the extensive comorbidity between anxiety, depression, and PTSD, it is likely that the use of either general symptomatology scales (e.g., BSI, SCL-90) or specific
trauma-related scales (e.g., IES) would yield elevated scores. Moreover, the use of the latter trauma-specific scales to measure VT is also questionable, unless the instructions are amended to direct the individual to complete the items in relation to clients’ traumatic material (as in Pearlman & Maclan, 1995). Otherwise, the questionnaire may measure clinicians’ responses to their own traumatic experiences, as might other trauma symptom measures.

Other methodological criticisms of VT research relate to the survey methodology, as it is often difficult to assess how representative the samples are of general populations. Response rates vary from 32% (Pearlman & Maclan, 1995) to 57% (Cornille & Meyers, 1999). It is possible that those who feel affected by their work are more likely to complete the questionnaire if they feel the research is relevant and useful. Conversely, those who are suffering most may view the questionnaire as an extra burden and not complete it. Selective sampling might also account for some of the differences between quantitative and qualitative studies. Qualitative studies that have generally provided more consistent support for VT might have naturally tended to recruit therapists who believed that they had been unduly influenced by their exposure to trauma work.

Measurement of exposure to clients’ trauma histories also presents researchers with difficulties. Some studies have assessed this—using measures of trauma survivors in the current (Cornille & Meyers, 1999; Follette et al., 1994) or recent caseload (Baird & Jenkins, in press), while others have attempted to assess both current and cumulative exposure (Brady et al., 1999; Pearlman & Maclan, 1995; Schauben & Frazier, 1995). Exposure has been assessed in terms of years of working with trauma clients, number of trauma survivors treated during career, estimates of how frequently the person is exposed to graphic details of trauma, hours of trauma work per week, percentage of clients who are dealing with victimization in their therapy, and work with trauma clients over the past year (Brady et al., 1999; Pearlman & Maclan, 1995; Schauben & Frazier, 1995). Other studies have compared trauma workers with a control group of counsellors (Johnson & Hunter, 1997). Clearly, it is difficult to compare the results of studies assessing different time frames through which exposure is being assessed, and it is also difficult to assess whether current or cumulative exposure is a stronger factor in experienced effects of trauma work. This also has implications for the actual concept being measured, as VT is seen as cumulative whereas STS may be more instant and reactive in relation to current clients. Currently, most studies have been cross sectional and the use of more prospective designs that might assess factors such as accumulative exposure, individual differences in adaptation and coping, effects of training, and supervision might be further systematically explored.

In summary, the rigor of the research within this area requires attention. In particular, the construct validity of VT and its associated concepts requires greater clarification. Additional studies need to be performed following Jenkins and Baird (2002) that should lead to greater clarity. The development of a well-standardised measure with scales that assess both emotional distress and alterations in beliefs because of working directly with traumatized clients should be a priority. Greater attention should also be devoted to the survey methodology employed to ensure that a representative sample of either trauma or health care workers are recruited to studies. Attempts should be made to assess the relative effects...
of trauma work as opposed to other sources of work stress on reported psychological distress and well-being. This might be achieved by using either nontraumatized control groups of health care workers, or ensuring that other more generic measures of emotional distress or occupational stress are employed alongside specific trauma-related measures. The adoption of prospective as well as cross-sectional designs would allow for the study of how VT might emerge over time as a consequence to trauma exposure, the suggested vulnerability of new therapists (Neumann & Gamble, 1995), and the adaptations that therapists might undergo because of training or supervision. Other moderating variables such as work-related factors (e.g., caseload and case mix) and organizational (e.g., compensation and injury claims), together with the personal attributes of health workers (e.g., personality, coping styles, trauma, and psychiatric history) also need to be carefully assessed. Finally, other sources of trauma within the workplace other than VT also need to be assessed and these might include direct exposure to violent incidents and work with terminally ill clients.

There also needs to be a greater understanding of the discrepancies between the quantitative and qualitative research findings. In particular, it may be useful to engage in qualitative studies of therapists with similar exposure to trauma work who report being differentially affected by VT. A careful examination of qualitative studies might also suggest other domains that might be included in any newly developed questionnaires of VT.

7. How might VT be relevant to mental health workers?

In order to summarise the research on VT and its consequences for health care workers, we wish to return to the four components which were proposed in the introduction, and briefly discuss the evidence base, further research which needs to be carried out and the implications for services.

7.1. Cognitive, emotional, behavioural, and physical responses

The research reviewed, in particular the qualitative studies, provides some evidence for emotional responses to hearing traumatic material. Some studies (Knight, 1997) suggested that emotional reactions are the most common, although evidence for physical effects during sessions (Iliffe & Steed, 2000) and behavioural responses (Steed & Downing, 1998) was found. It might be suggested that these reactions are normal responses to hearing about traumatic material and they may be more short- than long-term effects. For example, we know that significant and dramatic events are usually well remembered throughout the general population and have given rise to the notion of “flashbulb memories” (Conway, 1995). The mere exposure of individuals to traumatic material whether they are bystanders, television audiences, or therapists will lead to emotional distress given the very nature of the event and its classification as traumatic. It is still uncertain whether these emotional responses are significantly different to those described as VT or secondary traumatization.
7.2. Symptomatic responses

Symptoms of PTSD, burnout, and general psychological distress have been found by some studies to relate to trauma work, although most correlations are weak. Higher levels of PTSD symptoms were associated with cumulative exposure to trauma (Brady et al., 1999), percentage trauma survivors in caseload (Kassam-Adams, 1995; Schauben & Frazier, 1995), and being newer to trauma work (Pearlman & Maclan, 1995). Qualitative studies also suggested posttraumatic symptoms such as intrusive imagery, dreams, and thoughts (Steed & Downing, 1998). Symptoms of burnout were higher in trauma workers (Johnson & Hunter, 1997) and reported in the qualitative studies along with physical effects such as reduced energy and poor sleep (Iliffe & Steed, 2000; Steed & Downing, 1998). However, Cornille and Meyers (1999) found higher levels of general and trauma symptomatology but these were not associated with exposure to trauma material and were most predicted by assaults experienced at work. Therefore, there appears to be some evidence for symptomatic effects, but there may be other factors involved.

7.3. Cognitive changes in beliefs and attitudes

There appears to be less empirical evidence for changes in beliefs and attitudes as a result of trauma work. Schauben and Frazier (1995) found a significant but weak correlation in one area of beliefs, and Pearlman and Maclan (1995) found disruption in three areas associated with being newer to trauma work, but again with weak correlations. They also found that beliefs in the area of self-trust were less disrupted with more trauma work, suggesting a positive effect on beliefs. Brady et al. (1999) and Baird and Jenkins (in press) found no evidence of disruption in beliefs, although the qualitative studies did report changes in beliefs, view of oneself, and aspects of the world (Iliffe & Steed, 2000; Ortlepp & Friedman, 2002; Steed & Downing, 1998). The research relating to beliefs, which is a central aspect of the definition of VT, is inconsistent and inconclusive and so evidence for lasting changes is neither supported nor unsupported.

7.4. Additional effects on interpersonal and occupational functioning

Fewer studies have specifically investigated effects on interpersonal relationships and occupational functioning. However, Knight (1997) reported that the statements most often agreed with related to vulnerability in personal relationships and being overwhelmed by the work, suggesting that there may be effects in these two areas. There is a need for further research to assess the potential effects on these areas of functioning.

7.5. Summary

The evidence for VT in trauma workers is inconsistent and ambiguous. There may be some workers for whom the work is traumatizing and causes PTSD symptoms, more general symptomatic distress, and disruptions in beliefs and schemas. There appears to be more
consistent evidence for symptomatic responses, particularly intrusive symptoms, than for cognitive effects. It is also unclear what the associated factors are, and how they interact with each other. Personal history of trauma may be a key factor in interacting with trauma work, but the effect of this is still uncertain. It is also possible that some workers are already utilizing good coping strategies which inhibit the impact of this work and this is likely to influence the results of research in this area. There were also positive effects of trauma work, which were identified by some of the qualitative studies, and it is possible that these factors may also balance the negative impacts of the work. Further research needs to be carried out to investigate these factors and their interactions in more detail, and to assess further whether work with trauma clients affects workers specifically over and above what could be considered to be effects of the stressful nature of mental health work.

8. Suggestions for future research

This review has highlighted the current state of knowledge relating to VT. Several questions have emerged as being worthy of future research. Firstly, it is important to discover whether VT exists as it is currently conceptualised. The evidence to date is ambiguous and inconsistent and there have been a number of methodological issues highlighted in this review. The measures that are used to assess VT need to be further refined in order for the theory to be more specifically investigated. However, the qualitative research in particular suggests that for at least some there may be negative effects of doing this work. Secondly, an assessment of VT in generic health workers is needed, particularly in light of the responsibility to assess and address risks in the workplace. Thirdly, specific factors that may contribute to or protect workers from VT need to be evaluated, as well as the interaction between them. Related to this is the question of whether the level of exposure to traumatic material directly influences the amount of VT that occurs. Is there a “threshold” in which the risks to the worker are increased? How at risk are more generic workers who do not work full time with trauma victims but have a more varied caseload? Other risk factors, such as type of traumas experienced, need to be considered. For example, is a trauma where a person has deliberately harmed another person more likely to lead to VT than an accident or natural disaster? Alternative research methodologies need to be considered, particularly to further investigate the differences between findings already reported by quantitative and qualitative works. In this respect, longitudinal studies may be useful in identifying the process involved in VT and the relationship between exposure to traumatic material, coping style, and VT. It would be useful to identify how emerging themes from qualitative studies relate to work with other types of traumas. If conclusive evidence for VT is found, an important question from an occupational health viewpoint is what interventions can lessen the likelihood of VT occurring or help those who are suffering from it. There are clearly a number of further questions that need to be asked within this area of research to clarify effects, concept, measures, and generalisability, and this will also enable reflection on whether we should pathologize or normalize responses.
9. Discussion of implications

As stated earlier, there is an increased awareness of the employer’s responsibility to assess workplace risks to staff, and this includes mental health risks. However, many previous studies assessing the causes of staff stress have considered organisational and occupational characteristics (Wheeler, 1998) and specific aspects of the caseload have not been evaluated. Stamm (1997) reports on evidence that general health care providers, researchers, clergy, museum workers, and even those called for jury service are likely to come across traumatic material during their work, and suggests they may be vicariously traumatized by this material.

It is likely that many health service staff may become involved with trauma survivors as part of their work. Estimates of the proportion of the general population who have experienced potentially traumatic events range from 40% and 70% (Yule, Williams, & Joseph, 1999), although much fewer will develop chronic PTSD (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995) and many will remit in time (Ehlers, Mayou, & Bryant, 1998). A community survey revealed that overall, 33% of males and 27% of females reported childhood physical and/or sexual abuse (MacMillan et al., 1997). However, prevalence rates of experiences of trauma appear to be much higher in populations who are involved in mental health services. Over 95% of psychiatric outpatients are said to have experienced traumatic events and around 43% had recent PTSD (Mueser et al., 1998; Switzer et al., 1999). Macpherson and Babiker (1994) found that 47% of mental health workers (clinical assistants, psychologists, community psychiatric nurses, senior house officers, registrars, and art therapists) were currently working with adult survivors of childhood sexual abuse. Given that these figures relate to only one type of trauma (i.e., sexual abuse) and clients who have experienced other traumas are also likely to seek treatment, mental health workers appear to have a high chance of engaging empathically with trauma survivors during their work. Prevalence rates of abuse survivors in other settings (Keane, Young, & Boyle, 1996; Manchershaw, 1991) suggest that the risk of potential VT may also be relevant to staff working in primary health care teams and general medicine as well as mental health services. Clark and Gioro (1998) give examples of nurses in a number of different specialties who care for trauma victims during their work and have been affected by hearing accounts of trauma.

This literature review has revealed little consistent evidence for VT. However, it does appear that for some there are identifiable effects of trauma work that are detrimental to their mental health and beliefs, and perhaps one of the factors distinguishing VT from general work stress are the reported intrusive trauma symptoms. Much of the research described in this review was carried out with workers specialised in treating traumatized clients, and mostly carried out the in United States and Australia. It is difficult, therefore, to conclude how the concepts of VT/STS might apply to mental health workers, such as those in the UK with a more generic mixed caseload that might include some clients who have experienced traumas. Similarly, the degree of generalisability of work with trauma therapists to other occupational groups is also unclear, as suggested by Pearlman and Saakvitne (1995a) and Stamm (1997). It is also difficult to assess whether VT is likely to contribute to the high stress levels observed in health service staff, rather than factors such as organizational and work characteristics. It is also possible that those who work with traumatized clients are also those staff who are at a
higher risk of experiencing violence themselves during their work. This may also be a confounding factor in studies of VT.

It is possible that if VT does exist, it may not be restricted to those who are specialized trauma workers. It could potentially be a risk for health workers who engage in work with trauma survivors and more research is needed to establish whether this is the case. If VT is a risk for a large number of staff then this clearly has implications for organizations that have a duty to assess and reduce risks to the health of their staff. Sexton (1999) suggests that VT poses health and safety issues for workplaces, and notes that if these issues are not addressed, it is possible that future litigation or compensation claims for psychological injury at work may be brought against the organization. If workers can be traumatized by their work, and organizations do not assess and address the risk, serious financial and legal consequences potentially could follow. If risk factors for VT are identified, then employers may find they have a duty of care to staff in making them aware and enabling staff to address any specific issues (e.g., prior trauma histories) that may be relevant. However, it should be noted that contextual factors such as litigation and compensation, pensions, and early retirement could also be possibly relevant in relation to claims that a worker is suffering from VT. VT may therefore warrant the same investigation and consideration as more general staff stress in research studies.

10. Summary

Research on VT to date has provided evidence that is neither clear nor consistent, but it is an area that warrants further investigation. In particular, the methodological rigor within this area could be considerably improved by attending to the construct validity of VT and its measurement, issues of sampling, and the use of prospective designs. Nevertheless, some of the findings that have emerged suggest that for some workers, exposure to trauma work results in emotional distress, which may be considered an occupational risk. Whether it is useful to define this as VT or to consider it as a normal consequence of demanding health care roles is too early to determine. To date, the extent of this risk for staff working within the general health care system is not yet known. Previous research has been carried out with staff working solely with trauma, and the effects of working with trauma as part of a more varied caseload have not yet been studied. The risk factors that increase vulnerability to VT are also not yet distinguished. Further research in this area needs to be done before the potential risk of VT to staff working in the healthcare system can be assessed and managed.

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References


In J. P. Wilson, Z. Harel, & B. Kahana (Eds.), *Human adaptation to extreme stress—from the Holocaust to Vietnam* (pp. 219–238). London: Plenum.


