Secondary Traumatisation and Adversarial Growth: the Effects of Clinical Psychologist's Work on Their Well-being.

Thesis Submitted to the University of Leicester,

Faculty of Medicine and Biological Sciences,

School of Psychology in partial fulfillment of the degree of

Doctorate in Clinical Psychology.

Joanne Ablett

April 2010

Word Count

Section 1. Literature Review

6975 (References 874)

Section 2. Research Report

11333 (References 2549)

Section 3. Critique   **2348**

TOTAL (excluding references and appendices)   **20529 words**
      (with references and appendices)   **26340 words**

Contents

Section 2- Research Report

Abstract

Section 3- Critique

List of Tables

Literature Review

Main Research Report

List of Figures

Figure 2. Graphical Representation of PTGI Scores   **Appendix**

Appendices

Appendix 1. Data Extraction Form

Appendix 2. Literature Review Table 1

Section 1-Literature Review

Secondary Traumatic Stress: A Systematic Review of the Factors which may Increase Risks or Mitigate Effects for Health Professionals

Secondary Traumatic Stress: A Systematic Review of the Factors which may Increase Risks or Mitigate Effects for Health Professionals

Abstract

Health professionals working with survivors of trauma may suffer adverse effects to their own well-being through listening to accounts of traumatic events. These effects have been conceptualized in different ways; most particularly as secondary traumatisation or compassion fatigue, where PTSD like symptoms may be experienced. The more profound construct of vicarious traumatisation is considered to disrupt the professional's beliefs and schemas about themselves and the world.

Given potential vulnerability to these phenomena, interest has grown regarding what might cause professionals to be more or less affected by exposure to trauma-specific material. Factors have advanced to increase vulnerability to these negative effects, or to provide a protective mechanism against these effects or enhance growth. The current review systematically assesses quantitative literature reporting on secondary traumatic stress phenomena, interrogating published research up to December 2009. The focus of this review is on risk and protective factors, which, where identified, may be used to inform practice and training for mental health professionals. Methodological difficulties emergent from the research reviewed are considered; most particularly, the confusion created by the impact of differing theoretical conceptualizations and measures, and a lack of representative sampling. Evidence for certain risk and protective factors does exist, but the status of it is equivocal, and suggestions for future research to overcome some of these difficulties are made.

Joanne Ablett 2010

1.0 Introduction

It is increasingly recognized that 'there is a cost to caring' (Figley, 1995), such that those within health or social care professions, as well as informal carers, may suffer adverse effects to personal well-being as a result of the work they undertake. Professionals and researchers have been aware of this for some time in terms of more general 'carer stress', but more complex effects have now been noted

(Figley, 1995; Bride, 2002).

The parameters of DSM-IV diagnostic criteria have broadened such that symptoms of Post-Traumatic Stress Disorder (PTSD) can be experienced by a close friend or family member following hearing about traumatic events. (American Psychiatric Association, 1994). This vicarious process has been extended to include therapy professionals who are also exposed to individuals' traumatic material in their work. The notion of such distress has been conceptualised in different ways.

Overlap and lack of clarity of terms surrounding the negative effects of working with traumatized individuals, has meant that terms such as secondary traumatic stress and vicarious traumatisation are sometimes used interchangeably. Current definitions of each are therefore provided to facilitate conceptual clarity for the purposes of this review.

1.1 Burnout

Burnout, (a state of physical, mental and emotional exhaustion, which results from
cumulative exposure to emotionally demanding situations) is not specific to working with survivors of trauma, but can arise in any occupation, though some appear more vulnerable than others. Many studies in this domain have investigated symptoms of burnout alongside Secondary Traumatic Stress and/or Vicarious Traumatisation. This causes confusion around the effects attributable to secondary trauma.

1.2 Secondary Traumatic Stress (STS)/Secondary Traumatisation (ST)

This phenomenon suggests that psychological symptoms akin to those manifested in Post-Traumatic Stress Disorder arise through professionals' exposure to clients' experiences of trauma. Symptoms are argued to cluster into the same categories as those for PTSD, in line with DSM-IV categories of avoidance, arousal and intrusion, and may include flashbacks, nightmares, fear, sleeplessness, and avoidance. Figley defined the phenomenon as: 'the natural consequent behaviours and emotions resulting from knowing about the traumatizing event experienced by a significant other-the stress resulting from helping or wanting to help a traumatized or suffering person.' (Figley, 1995b, p7).

1.3 Compassion Fatigue (CF)

In its early operationalisation, compassion fatigue was understood as a particular form of burnout relating to the caring professions (Joinson, 1992). However, increasingly the concept has become used interchangeably with secondary traumatisation, with its focus on a variety of symptoms and emotional responses resulting from work with survivors of trauma. In fact it has been argued that compassion fatigue is a form of secondary traumatic stress reaction. (Figley, 2002; Bride, 2003). It results from the natural response of empathy towards individuals who have experienced suffering. Therefore, it is suggested that very competent therapists/caregivers may be the most vulnerable due to their capacity for

expressing empathy. (Salston & Figley, 2003).

1.4 Vicarious Traumatisation (VT)

Vicarious Traumatisation was initially described as: 'the transformation in the inner experience of the therapist that comes about as a result of empathetic engagement with clients' trauma material.' (McCann & Pearlman, 1990). 'Vicarious' acknowledges that the therapist may experience parts of the clients' trauma as if it had happened to them. A conceptual framework for understanding the phenomenon is embodied in Constructivist Self Development Theory (CSDT) (McCann & Pearlman, 1990), an interactive model, emphasizing the individual nature of trauma experience. Central to this model of distress, and distinguishing it from STS and CF, are disruptions to a professionals' cognitive schema, changing one's self-identity and view of the world. McCann and Pearlman indicated disruptions to schemas can occur in five fundamental areas of need; safety, esteem, trust/dependency, control and intimacy. Thus, therapists may construe a more threatening and dangerous world because of others repeated disclosure to them of pain and suffering perpetrated by others. CSDT emphasises the importance of the imagery memory system, suggesting that therapists may experience PTSD symptoms, such as, flashbacks, dreams or intrusive thoughts due to incorporating clients' material into their own memory. (McCann & Pearlman, 1990). Some researchers have questioned the evidence for VT as a separate concept (Sabin-Farrell & Turpin, 2003).

1.4.1 Relationship between terms

As discussed, Secondary Traumatic Stress is a construct consisting of demonstrable secondary trauma symptoms, including arousal, avoidance and intrusion, in health professionals as a result of working with individual's who have experienced trauma. Compassion Fatigue is now considered to be a specific form of STS (Figley, 2002). Vicarious Traumatisation is a construct which extends these effects further, suggesting in addition to the presentation of trauma symptomatology in these workers, there will be resultant changes in schema about the self, others and the world, effectively a changing of world views.

1.5 Compassion Satisfaction (CS) and Adversarial Growth

Whilst manifestations of distress may result from exposure to traumatic material, there is a growing body of psychological evidence demonstrating that positive changes can also accompany stressful and traumatic events. Although a relatively recent line of empirical investigation, it has a rich history in philosophy, literature, and humanistically and existentially- oriented psychotherapy.

By contrast to a perspective of pathology, staff working in health professions also seem to experience positive effects. Compassion Satisfaction is the dominant construct used to describe the accomplishment derived from the work of helping others. (Stamm, 1998), and it has been suggested that this can provide a protective mechanism for trauma workers, making them less vulnerable to adverse effects of the work (Joseph & Linley, 2007).

As with the phenomena of secondary trauma effects, growth has been reported in therapists who are not themselves directly exposed to any danger from life-threatening events, but appear to vicariously grow as a result of exposure to client's experiences (Linley, Joseph & Loumidis, 2007). The status of adversarial growth is still debated: as a protective factor from adverse effects of the work, or an entirely separate phenomenon, which can occur either alongside secondary trauma or exist even in its absence (Bonnano, 2002).

1.6 Why should we care?

There has been much debate around the existence of vicarious traumatisation and the lack of conceptual clarity over this and other concepts embracing distress, with difficulty noted in providing clear empirical evidence for the different constructs (Stamm, 2005). Burnout appears a separate construct, arguably more synonymous with general work 'stress', and thus will not be focused on in this review. However, the presence of identifiable phenomena of distress, albeit with conceptual overlap between STS and VT, suggests there are specific factors around trauma work that have effects on the mental health and well-being of health workers. Whilst phenomenology has not been adequately fitted to conceptual categories (Sabin-Farrell & Turpin, 2003), it seems important to review the available evidence regarding these effects.

The focus of this review will be on examining the evidence for factors which may increase the risk of, or provide protection from the presentation of STS. STS will be the concept specifically focused on because it covers a demonstrable range

of effects which have been conceptualised and evidenced to a greater extent than the more debatable phenomenon of VT (Sabin-Farrell & Turpin, 2003), and, STS symptom measurability is easier. VT is concerned with phenomena which are more difficult to evidence through systematic quantitative measurement. However, where a piece of research is focusing on a combination of these phenomena, it will be considered within the review, as most evidence has not managed to entirely separate these concepts.

1.7 Previous reviews conducted in the area.

Eight reviews have been previously undertaken within the area. Three of these were focused on specific areas of work; one examining staff working with individuals who were victims of crime (Salston & Figley, 2003), another oncology nurses (Sinclair 2007), and the third, staff working with sexual offenders (Moulden & Firestone, 2007). Collins (2003), and Canfield (2005) adopted a substantially narrative approach to their literature reviews, with no overt, systematic quality appraisal of the studies reviewed. Sabin-Farrell and Turpin (2003) conducted a comprehensive review of the evidence for vicarious traumatisation in healthcare professionals. There was some discussion of factors which exacerbated likelihood of VT, but the specific focus of the review comprised interrogating appraised evidence for the existence of VT as a concept. Bride (2004) reviewed risk and protective factors for STS, VT and general psychological distress in psychosocial care providers reporting on 15 papers. Finally, Baird (2006) reviewed sixteen papers investigating STS and VT, over the period 1994 -2003, using a 'levels of analysis' epidemiological approach to synthesise the research. In conclusion, a systematic

review of risk and protective factors for STS exclusively, ensuring a rigorous

conceptual and operational focus has not been undertaken within the area.

2.0 Method

A literature search was conducted between the 2nd and the 20th January

2010 using Psych Info, Medline, Web of Science, Scopus and Cochrane electronic

databases. Keywords used were; *secondary traumatisation, secondary traumatic*

stress, compassion fatigue, vicarious traumatisation and health professionals. The

search was focused on published works, with no limit being applied to publication

year, to minimise bias. Titles and abstracts were examined specifically for a focus

on professionals who work with individuals who have experienced trauma of any kind, and excluded if not. A search was conducted on Google Scholar, and websites relating to the topic examined for salient material. D.ClinPsych websites were scoped for current research in the area.

This review wished to focus on quantitative evidence to ensure that constructs were clearly defined and robust measurement tools used, to enhance the systematic synthesis of the material. Qualitative papers were therefore excluded from the appraisal, as were anecdotal or discussion articles. A form was produced to aid data extraction, focusing on; the sample, professional context, design, conceptualization and focus, theoretical adequacy, measures and an overall quality judgment of each paper (See Appendix). Studies were excluded if they focused exclusively on VT or burnout. Other papers were excluded if based on emergency personnel responses to disasters or factors where primary traumatisation was likely due to professionals proximity to injury/death in those they helped, for example, in war and conflict zones, as it has been found that treating an injured victim (thereby experiencing the trauma directly) and knowing someone who had been injured, had a significant effect on the level of emotional distress experienced by professionals (Meadors, 2008; Warren et al., 2003).

3.0 Results

107 papers were extracted during the search, and abstracts reviewed. Studies were discarded as specified above. 12 studies remaining met the inclusion criteria and form the sample for this review (see Table 1). They are asterisked in the reference section. The discussion will present an appraisal of the overall findings, and synthesise these in relation to risk and protective factors.

3.1 Staff working with those who have experienced sexual abuse and domestic violence

Two studies focused on staff working with sexual abuse survivors, with inconsistent findings. Brady, Guy, Poelstra and Brokaw (1999) found evidence that greater exposure to clients who had experienced sexual abuse correlated with higher trauma symptoms. This study used standardized, statistically robust measures drawing from a national randomised sample of 1000 females appearing on members lists of the American Professional Society on the Abuse of Children (APSAC) and the American Psychological Association (APA), achieving a 47% response rate, high for work in this area. Researchers included a Spiritual Well-being Scale, finding that greater exposure to trauma material was linked with increased spiritual well-being. No significant differences in levels of STS were revealed between therapists working with adult or child populations, nor was there evidence that personal history of sexual trauma or personal therapy appeared to mitigate or exacerbate symptoms.

Baird and Jenkins (2003) found that greater exposure to trauma was neither related to STS nor general distress. Conversely, they found higher caseloads correlated with lower adverse symptoms, with counsellors who had greater years in education showing reduced symptoms. The theoretical underpinning of the study and the conceptualization and measurement of adverse effects makes unraveling the results difficult in relation to STS exclusively. Researchers exploration of STS, VT, CF and Burnout, whilst at the same time comparing paid and volunteer workers, generated equivocal results. Four out of the five measures used in this study were

standardized and psychometrically robust, supplemented by questions relating to recent trauma and exposure generated for the study. The sample source is not specified and response rates were not specifically monitored, making it difficult to assume generalisability. The correlational design poses problems as cannot imply causality. Inclusion of voluntary workers may have affected the results due to different organizational and contextual circumstances, and could be assumed that paid employees have different caseload levels, responsibilities, expectations and training, which may contribute to higher symptomatology. It is unfortunate that a growth measure was not included to explore explicitly whether the lower levels of adverse symptoms reported in more experienced workers were linked in any way to increased growth.

3.2 Social Workers

Two studies exploring the impact of working as a Social Worker in child welfare and oncology are reviewed. Child welfare agency workers were examined to assess whether a personal history of childhood abuse or neglect heightened the risk of STS (Nelson-Gardell & Harris, 2003). All of the Child Trauma Questionnaire (CTQ) scales were found to significantly correlate with STS, with emotional and sexual abuse having the largest relationship. Age also significantly predicted STS, in contrast to gender, length of work experience and educational levels. Sampling strategy for this study was complicated posing many problems in terms of the generalisability of findings: there were two separate occasions of data

collection with this study, partly using a convenience sample. The processes involved in both sets of data collection differed from each other, and the response rate for the second set was mislaid. The time span between completing the first set of measures and completing the CTQ also differed, introducing discrepancy in terms of the demand characteristics and time available to participants for their responses. The authors themselves note that those that returned the CTQ differed in many respects to those who chose not to, following a breakdown analyses of both samples, suggesting a selection bias in sampling. In spite of these differences, the data sets were combined for analyses. Due to the extent of methodological difficulties, it is difficult to draw firm conclusions. In addition, STS had been conceptualized as including changes in worldview, citing it within the CSDT theory. This is a model of VT, not STS, and results in the study being inconsistent across the introduction, measures and discussion.

Sampling difficulties appear to be a prominent methodological problem in this area. Focusing on oncology social workers, Simon, Pryce, Roff and Klemmack (2005) sampled only 21 participants, sampling selection was largely unspecified, and no response rate is reported. Despite an arguably undersized sample, certain factors appeared statistically significant in relation to adverse symptoms; age, duration working in oncology, and the number of clients seen each month. Trauma symptoms included; 57% reported having difficulty staying asleep, 47% forced themselves to avoid thoughts and feelings relating to frightening experiences, 42% reminded themselves to be less concerned about their clients well being and 31%

reported outbursts of anger which were not easily explained, all pointing to STS symptoms. The authors were systematic in conducting an updated reliability analysis on the CFS prior to the study, and quoted the values which were lower than the original test for STS and burnout, but still satisfactory. However, it is predominantly a descriptive study due to the small size of the sample precluding use of rigorous statistical analyses.

3.4 Therapists working in trauma

More recently, research has tended to focus on generic trauma workers in various professional capacities, often with mixed discipline samples. The influence of coping styles, personal trauma history, and supervision on adverse symptoms were examined in a sample of telephone counselors (Dunkley & Whelan, 2006). Theoretically, they conceptualised these effects as VT, yet in fact they describe PTSD symptoms, arguably more in line the concept of STS. Levels of PTSD were reported as generally low, but strong supervisory relationships were associated with even lower levels of symptoms. Although a positive correlation was reported between personal trauma history and STS, it was not significant. The sample was recruited from nine different organizations of volunteer and paid workers. Similar methodological difficulties discussed previously in relation to generalisability of findings and the inclusion of volunteer workers in the sample are relevant here (see Page 12).

Specifically examining the influence of attachment styles on vulnerability to symptoms of STS and VT in a large sample of female trauma therapists, Marmaras, Siegel and Reich (2003) again conceptualized VT within the STS construct. However, both a VT and an STS measure were included in the study. Sampling methods are unclear, no response rate is reported and recruitment methods are unspecified. Almost 50% of the sample were over 46 years old and 42% were trauma survivors themselves, suggestive of a selection bias which may have affected the results significantly. All-encompassing statements are made based on very limited evidence from this study, suggesting that therapists with unresolved issues from their childhood could hinder the therapeutic process and be less effective in their work with clients who have experienced trauma (Marmaras et al., 2003).

By contrast, a rigorously conceptualized study with mixed disciplines of therapist comprising the sample, focused on the role of therapist's beliefs on STS symptomatology, in addition to four factors of work experience, direct and recent trauma experience to therapist, exposure, and differences between child and adult work (Mclean, Wade & Encel, 2003). A measure of therapist beliefs was constructed by the authors, several steps being taken to enhance the reliability, and other measures used reported psychometrically robust properties. It is unclear exactly how participants volunteered initially. Apriori power calculations were not reported. All levels of distress fell within the sub-clinical range. Recent personal

distress was not found to be associated with STS symptomatology.

A study enabling comparisons regarding the effects of the work on well-being across different professional groups within Mental Health services, types of organizations, and rural/urban localities, reported on the largest sample of reviewed studies (Sprang, Clark and Whitt-Woosley, 2007). The ProQOL, a statistically robust measurement tool, was responded to by 1121 mental health providers (only 20% of potential respondents), consisting of psychologists, psychiatrists, social workers, therapists, and counsellors. Individual, occupational and environmental factors considered to influence STS and CS were explored. Female gender was associated with higher levels of adverse symptoms, occupation proved a significant factor, with psychiatrists reporting higher negative symptoms than non-medical staff. However, the authors acknowledged that in the area where the sample was sourced, there were a shortage of psychiatrists with higher caseloads and less peer support. Clinicians working in rural areas showed more negative symptomatology, perhaps due to the strain involved in covering a larger geographical area and less regular peer contact/support, though these influences were not explored. Therapists with specialized training reported both greater CS and decreased negative symptoms. Again, this study included investigation of burnout, which complicated the flow of results in terms of specific trauma symptoms.

Positive effects of the work, and growth have also been explicitly examined (Linley & Joseph, 2007), but with fewer studies and covering a more recent time-

frame, challenging an emphasis in the literature on the adverse effects. Possible influences on well-being were divided into occupational and psychological factors to report the results gleaned from a therapist sample selected randomly from BPS registers. Although not specifying breakdown of constituent professions within the sample, examination of demographics revealed that the majority were counsellors or counselling psychologists. Increased personal growth appeared related to the use of personal therapy, clinical supervision, personal trauma history, greater hours worked and female gender. Therapists working within a CBT orientation were less likely to report positive changes or personal growth. Length of therapy work was associated with greater negative changes. Many of the participants were in individual practice, which is perhaps not representative of therapists in the UK in general. The age range of the sample was up to 85 years, with the majority over 50 years, so younger therapists were not well represented, and some therapists were only working for one hour a week with clients, with the mean hours being 12. All of these issues with the sample contribute to questioning how representative it is, and therefore the generalisability of the findings. A 0.05 significance level was adopted for the results, which the authors admit inflates the possibility of a Type 1 error due to the sample size and volume of factors on the measurement scales. However, they justified this by their wish to highlight further areas for investigation.

Devilly, Wright and Varker (2008) used a battery of measures, with a mixed sample of mental health professionals in Australia. Their conceptual focus was broad, including exploration of burnout. This created confusion in the presentation

of results in terms of specific secondary trauma effects. Victimization history and empathy were more unique aspects included in this study, the former measured by a self-report assessing prior traumatic events in detail, developed by the authors for the purposes of the study. Apriori power calculations were exceeded. A history of personal trauma was not indicative of negative outcomes, and 'work stress' was greatest amongst those with smaller trauma caseloads, contrasting with other findings (Nelson-Gardell & Harris, 2006). However, the CTQ used by the latter has more psychometric rigour than the formers Victimization History questionnaire developed for the study.

3.5 Working with Survivors of Torture

The one study in this category focused on German-speaking trauma therapists who worked specifically with survivors of torture, in Germany, Austria and Switzerland (Deighton, Gurris & Traue, 2007). Their mixed professional sample offered various therapeutic approaches. This study was unique in its examination of the effects of 'working through' trauma with clients, examining the advocacy of working through, and the actual degree of working through with recent cases (See Glossary for explanation of terms). Comparing differences across occupations and different models, they found that those working in a psychodynamic modality scored higher on vulnerability and task burden, and those with a previous trauma history produced higher scores of distress. High symptomatology was generally negatively related to the degree of working through,

but positively related to its advocacy. The authors termed the position reflecting high advocacy of working through but low degree of working through the discrepancy scale, and this was the strongest correlate of high symptomatology, correlating significantly with all the distress scales. They compared the symptomatology levels on the ProQOL with those from the database of its authors (Stamm, 2005), and found the current sample to be higher than the combination of teachers, therapists, nurses and aid workers in this database. These results suggest that it is not exposure itself which leads to symptoms, but how the exposure is handled, which could be supported by others findings in this area (Linley & Joseph, 2007; Devilly et al., 2008). Fear or avoidance responses within therapy, linked with lack of working through, created frustration in these workers. Deighton et al. were very explicit in their reporting of use of measures and the reliability and validity of all, and their process of analysis. However, their sample size was relatively small and sampling method not explicit, which makes it difficult to comment on the generalisability of their findings. They did manage to achieve a very good response rate for the area (55%).

3.6 Therapists in Training

Adams and Riggs (2008) undertook an exploratory study with therapist trainees on clinical or counseling training programmes in the US, likely to produce different outcomes due to the nature of training courses and the trainee status. The authors focused on the influence of defense styles (See Glossary), history of trauma

experience and trauma-specific training on outcomes. VT was conceptualized as the focus, but STS symptoms were included within this, for example PTSD symptoms, not VT exclusively. A significant association was revealed between negative effects and defense styles, with a 'self sacrificing style' and a 'maladaptive/image distorting style' yielding higher distress scores. There was an interaction between defense style and personal trauma history on outcomes. Personal trauma history was only investigated with a yes/no response and the authors note that this was quite limiting in terms of investigating these effects. Arguably, different types and the timing of trauma would have an impact on outcomes. In addition, due to a disproportionally high number of the more adaptive defense styles in the sample, it is questioned whether those who had difficulties in this area were more likely to volunteer for this particular study, thus producing a biased sample.

In summary, studies are flawed by poor sampling methods, which have introduced selection bias and/or have had poor response rates. Sample sizes tended to be small and those who volunteer to take part in these studies may be those who suffer the most effects from the work. Alternatively, therapists more able to cope and more experienced may feel in a better position to volunteer for such research, the 'healthy worker effect' (McLean et al., 2003). These factors markedly limit the ability to generalize from the findings.

The vast variety in the combination of measures used makes studies almost impossible to compare on an equal basis. This is complicated further by many authors creating their own scales with limited validity or reliability. The confused

conceptualization of different types of distress (CF, STS, VT, and Burnout) has resulted in results both confusing and complicated. A tighter conceptual focus would have provided more useable evidence. There are limitations with the use of self-report methods in terms of the subjective nature of what people will report. However, this seems the most appropriate method for the issues being investigated. Other more objective methods could be utilized, such as examining absence rates relating to work issues, especially long-term sickness. There is a general problem with the studies all being of a cross-sectional nature. This provides no evidence for the direction of causality of the associations reported. Longitudinal studies are required to rectify this shortcoming.

4.0 Discussion

This review sought to identify and examine evidence for risk or preventative factors for STS as a consequence of exposure to traumatized clients. In examining these issues, some factors have also been shown to have positive effects, which may or may not add to prevention of adverse reactions, so these are included. The results will now be summarized in terms of these factors, then a general overview and directions for future research considered.

See Appendix Table 2- Synthesis of Evidence

4.1 Risk Influences

Possible vulnerability factors for negative effects seem to fall into different categories. Some authors have broken these down into individual/environmental factors, or individual, exposure and organizational factors, though these can overlap at times, and this appears to be a useful way to categorise the different effects stemming from the literature reviewed.

4.1.1 Individual Factors

4.1.1.1 Personal trauma history

One of the factors most often explored is the effect of personal trauma history, most notably the experience of childhood trauma or neglect on a professional's vulnerability to negative effects from the work. Equivocal findings were revealed across the studies reviewed. A personal history of childhood abuse appeared to be significantly correlated with STS across all CTQ scales, with emotional and sexual abuse having the strongest correlations (Nelson-Gardell & Harris, 1999). Further support for this finding came from evidence that those with previous trauma showed higher distress levels on ProQOL and CF measurements. On the distress scales, they had higher levels for vulnerability, somatization, team stress and for PTSD type symptoms (Deighton et al., 2007). Dunkley et al. (2006) also

found a link between personal trauma history and vulnerability to risk. However, other researchers found no evidence of higher negative symptoms related to a personal trauma history (Linley & Joseph, 2007; Devilly et al., 2008).

Notably, the measures used to attain information regarding previous personal trauma in therapists have varied across these studies. It is unclear how Linley and Joseph (2007) sought this information, and some used measures developed by researchers themselves (Deighton et al., 2007; Devilly et al., 2008), have dubious validity. Nelson-Gardell and Harris were the only investigators who used a statistically robust and specific measure in using the CTQ. Their findings also suggested that age had an interactional effect with a childhood trauma history, with younger therapists being more at risk in relation to this factor. Personal stress, including recent losses, understandably has been linked to vulnerability, but not specifically to increased STS symptomatology (Simon *et al.*, 2005).

On balance, it would appear that a personal trauma history may make professionals more vulnerable to negative effects from the work, but perhaps this is in interaction with other personal factors, for example age as stated, and coping styles (Adams & Riggs, 2008). However, the evidence is inconsistent and requires further investigation with larger samples and

methodologically sound designs.

4.1.1.2 Age and Length of Experience

Evidence for these factors was also equivocal. Neither age nor length of experience was found to correlate with any negative effects (Nelson-Gardell & Harris, 1999; Deighton *et al.,* 2007; Baird & Jenkins, 2003). Conversely, Linley and Joseph (2007) found that greater length of experience was associated with more negative changes and adverse symptoms, relating to cumulative exposure effects on adverse reactions to the work. Brady et al. (1999) findings would lend support to this idea too, that cumulative exposure, likely to be a function of length of experience, had a significant effect on increased levels of STS. In further contrast, it was found that less experienced therapists showed higher levels of negative symptoms in other studies (McClean, 2003; Sprang et al., 2007).

Overall, these findings present an inconclusive picture. Again, perhaps this is due to the different conceptual focuses across the studies and the varied use of measures.

4.1.1.3 Education/Specialist Training

Regarding education, Baird and Jenkins (2002) found that the more educated in their sample showed less negative effects. Others examined this finding no effect (Nelson-Gardell & Harris, 1999). Conversely, Sprang et al, (2007) found those with higher-level degrees to experience more negative symptoms. In terms of specialist trauma training, it has been found that people are more at risk if they have not received this (Adams & Riggs, 2008; Sprang et al., 2007)

4.1.1.4 Models of Work/Client Group

Regarding therapeutic modality, Linley and Joseph (2007) found CBT therapists to be more at risk of adverse effects, and less likely to report positive changes. Deighton *et al*. (2007) found psychodynamic/analytic-oriented therapists to be more at risk of higher scores on vulnerability and task burden factors specifically. Others have found no relationship between theoretical modality and risk factors (Devilly et al., 2008), and many did not consider this within their research. Work with specific client groups, elicited no relationships with vulnerability (Brady et al., 1999; Devilly et al., 2008; McClean et al., 2003).

4.1.1.5 Defense Styles, Coping Strategies and Therapist Beliefs

Coping strategies have been explored, with emotion focused or avoidance/escape coping methods found to be associated with increased negative symptom levels (Dunkley & Whelan, 2006).

Adams and Riggs (2008) focused on defense styles, finding a significant interaction between these, personal history of trauma and increased vulnerability to negative symptoms. Specifically, they found that self-sacrificing defense style, common in individuals drawn to helping professions, to be associated with high negative symptoms, especially if combined with a personal trauma history. Adaptive defense styles were associated with lower distress symptoms. This would be an interesting area for further research.

Another unique area investigated was the effect of the complementarity of the advocacy of working through and the degree of working through in therapists (Deighton et al., 2007). A high advocacy of working through trauma with clients coupled with a low degree of actually working through was found linked to higher distress levels. Similarly, it has been found that irrational and exaggerated type therapist beliefs are the best predictor of negative symptoms (McLean et al., 2003). However, this was based on a measure developed by the authors for this study and there is no further evidence from other researchers.

Initial findings in these areas which have not been investigated more widely would be interesting to follow up in future work, especially as these factors are

perhaps some that could be managed better by individual professionals and organizations/training courses if they were clearer.

4.1.1.6 Attachment Style

Marmaras et al., (2003) investigated the effect of attachment styles on negative symptoms, finding a significant relationship between insecure attachment styles in therapists and higher levels of negative effects. However, other variables were neither investigated nor controlled for so it cannot be assumed that these results were specifically related to the attachment styles of the sample. Nonetheless, it is an interesting area and further exploration would be useful.

4.1.2 Trauma Exposure Factors

The theoretical underpinnings of the phenomena and concepts being discussed, has understandably privileged exposure. Length of experience may also be considered a measure of exposure (see personal factors). Many studies have found a link between greater exposure, in terms of higher caseloads and greater hours worked, with increased negative effects (Brady et al., 1999; Linley & Joseph, 2007; Devilly et al., 2008, McClean, 2003; Sprang et al., 2007). Conversely, Baird et al., 2003 found that lower exposure in terms of caseload was a risk factor. This was mainly related to volunteer workers and perhaps there were different influences here, for example, perhaps if they were less experienced and had few cases, they

may not feel adequately skilled or familiar with the work. It could be hypothesized that they had less peer support or alliance with a specific professional identity. Other than this contrast, the evidence appears quite strong that exposure levels can be a significant risk factor for the experience of adverse effects from the work, and this should be considered in terms of general caseloads but also client mix on caseloads, as adverse effects appear more related to high trauma specific work (Sprang et al., 2007).

4.1.3 Organisational

Organisational factors have been investigated in the literature, though frequently implicitly with individual characteristics or trauma exposure factors. Exposure implied by caseload can be a function of the organization or service in which the clinician works, e.g. if resources are scarce. Additionally, factors such as the comparability of therapists' beliefs/goals and their practice could be linked to organizational/service constraints. This is relevant in terms of findings around advocacy and working through of trauma. If there is a high expectation or intention of working through trauma with client, but in practice this cannot be undertaken, which could be due to organizational constraints, then this may increase vulnerability to negative effects (Deighton et al., 2007). This needs further investigation in terms of being applied to training, supervision and service evaluation to limit these discrepancy states if they widely exist.

4.2 Preventative Factors

Research studies have placed less focus on preventative factors, but it is important to know what may reduce vulnerability for practitioners in addition to what may place them at greater risk. Some influences have been reported; a sense of coherence was found the best predictor of lower distress (Linley & Joseph, 2007), adaptive defense styles and coping mechanisms were also linked with decreased symptoms (Adams et al., 2008), as was a secure attachment style (Marmaras et al., 2003), and rational therapist beliefs about the therapeutic process (McClean, 2003). Strong supervisory relationships were linked with lower symptom levels, so arguably providing a protective effect (Dunkley & Whelan, 2006). More highly educated counselors have been found to experience less negative symptoms (Baird & Jenkins, 2003), and specifically those who have had trauma-specific training (Sprang et al., 2007). In terms of exposure, a smaller caseload and a more varied mix of clients on the caseload have been found to prevent adverse effects (Brady et al., 1999; Sprang et al., 2007). Those working in private or profit-making practice (as opposed to public or charitable services) experienced less distress symptoms (Sprang et al., 2007). Perceived interpersonal support levels were linked to lower symptoms (Devilly, 2008). It is unfortunate that the overall evidence for specific influencing factors here is sparse, with many researchers not investigating consistent factors. Additionally, as stated previously, samples have not always been generalisable and measures of varying statistical quality have been used. It would be

useful to explore these areas further so that findings can be confirmed with the hope of applying them to professional training and organizational development.

4.3 Enhanced Experience

Many of the studies reviewed did not focus on which variables may actually enhance the experience of the work. It is debatable whether these factors could also have a protective effect in themselves due to increasing the well-being of professionals, but this is not a clear-cut concept (Bonnano, 2003). Considering factors of growth, compassion satisfaction and personal accomplishment adds another dimension to this area of work, theoretically aligned with the Positive Psychology movement.

Linley and Joseph (2007) focused attention on enhancing factors, finding that the use of personal therapy by therapists and regular clinical supervision were linked to personal growth, along with the strength of the therapeutic bond and a personal trauma history, which may suggest that therapists who have suffered traumas themselves may be able to find more meaning and therefore satisfaction in the work. Greater trauma exposure was associated with higher spiritual well-being, again perhaps linked with meaning making, and a higher current caseload was linked with increased growth and positive changes (Brady *et al.*, 1999).

It has been reported that more specially trained therapists show higher CS (Sprang et al., 2007), and that more experienced trauma workers report greater personal accomplishment (Baird & Jenkins, 2003). In terms of therapeutic modality, one study found a positive relationship between the use of a Transpersonal approach and growth (Linley & Joseph, 2007).

4.4 Overview

The literature reviewed has shown some interesting insights into evidence for factors relating to risk, preventative and enhanced experience in work with individuals who have experienced trauma. These suggestions need further investigation, especially those that have been examined less often, with a more exclusive focus on trauma symptoms as opposed to general burnout. Many of the studies have taken a very broad conceptual approach and there have been significant methodological issues with the majority of work in the area making it difficult to draw clear conclusions from the literature. Most notably, sampling issues have limited generalisability of the findings, and the use of incomparable measures has made synthesis of the material difficult. The evidence that exists is often equivocal.

Disappointingly, UK-based studies are scarce, and these issues are under-investigated for the many practitioners working in mental health within the NHS. Work-related problems account for a significant proportion of sickness absence within the NHS, with organisational stressors within a large public service

prominent. The combination of these different responsibilities, demands and expectations, coupled with the risk of STS resulting from client work needs to be explored. Growing evidence for the existence of STS symptoms and its relationship with certain risk and preventative factors, needs further clarity. The evidence so far relating to positive changes and personal growth as a result of the work is inspiring and provides a more comprehensive picture. Further investigation may be warranted to inform practice and indeed professional training in order to minimize the negative effects of the work and increase mental well-being of professionals.

If the evidence-base was stronger, changes could be made on individual and organizational levels to assist in minimising vulnerability factors. Simple changes to the structure of services could enable better client mixes, and caseloads could be monitored and managed more effectively. However, evidence needs to be confirmed before organisations, and indeed individuals would be willing to make any changes in this regard. Professionals themselves need to be promoting a growing evidence base not least for their own well-being at work.

4.5 Future Research

Further research should be conducted in the UK, particularly focused on NHS practitioners, because they undertake the substantial volume of mental health work in the UK. Work with individuals who have experienced trauma, of various kinds and to varying extents can be seen in many different service specialties within

the NHS. These services may employ many different professional groups providing direct care to these individuals.

Further research could explore the risk and preventative factors identified by the literature so far, but using larger samples and overcoming methodological issues so that findings are more generalisable. Clinical Psychologists as an occupational group have not been researched specifically in the literature, yet they are likely to be exposed to clients who have suffered varied forms of trauma in their lives, working in varied services, alongside juggling other responsibilities aside from direct clinical work. This could be a risk or preventative factor for them as a profession. Research has suggested that higher percentages of time spent in research activities were associated with lower distress in therapists, and higher percentages of time spent in clinical activities were associated with increased avoidance symptoms (Chrestman, 1995). This would be interesting to explore in relation to Clinical Psychologist's varied role.

References

* denotes study used in review

*Adams, S. A., & Riggs, S. A. (2008). An exploratory study of vicarious trauma among therapist trainees. *Training & Education in Professional Psychology, 2*(1), 26-34.

Arnold, D., Calhoun, L. G., Tedeschi, R., & Cann, A. (2005). Vicarious posttraumatic growth in psychotherapy. *Journal of Humanistic Psychology, 45*(2), 239-263.

Badger, J. M. (2001). Understanding secondary traumatic stress.[see comment]. *American Journal of Nursing, 101*(7), 26-32.

Baird, K., & Kracen, A. C. (2006). Vicarious traumatisation and secondary traumatic stress: A research synthesis. *Counselling Psychology Quarterly, 19*(2), 181-188.

*Baird, S., & Jenkins, S. R. (2003). Vicarious traumatisation, secondary traumatic stress, and burnout in sexual assault and domestic violence agency staff. *Violence and Victims, 18*(1), 71-86.

*Brady, J. L., Guy, J. D., Poelstra, P. L., & Brokaw, B. F. (1999). Vicarious traumatisation, spirituality, and the treatment of sexual abuse survivors: A national survey of women psychotherapists. *Professional Psychology: Research and Practice, 30*(4), 386-393.

Bride, B. E. (2004). The impact of providing psychosocial services to traumatized populations. *Stress, Trauma and Crisis, 7*(1), 29-46.

Bride, B. E. (2007). Prevalence of secondary traumatic stress among social workers. *Social Work, 52*(1), 63-70.

Calhoun, L. G., & Tedeschi, R. G. (2006). The foundations of posttraumatic growth: An expanded framework. In L. G. Calhoun, R. G. Tedeschi, L. G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research & practice.* (pp. 3-23). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.

Canfield, J. (2005). Secondary traumatisation, burnout, and vicarious traumatisation: A review of the literature as it relates to therapists who treat trauma. *Smith College Studies in Social Work, 75*(2), 81-101.

Collins, S., & Long, A. (2003). Working with the psychological effects of trauma:

    Consequences for mental health-care workers--a literature review. *Journal of*

    Psychiatric & Mental Health Nursing, 10(4), 417-424.

*Deighton, R. M., Gurris, N., & Traue, H. (2007). Factors affecting burnout and

    compassion fatigue in psychotherapists treating torture survivors: Is the

    therapist's attitude to working through trauma relevant?. *Journal of Traumatic*

    Stress, 20(1), 63-75.

*Devilly, G. J., Wright, R., & Varker, T. (2009). Vicarious trauma, secondary

    traumatic stress or simply burnout? effect of trauma therapy on mental health

    professionals. *Australian and New Zealand Journal of Psychiatry, 43*(4), 373-

    385.

*Dunkley, J., & Whelan, T. A. (2006). Vicarious traumatisation: Current status and

    future directions. *British Journal of Guidance & Counselling, 34*(1), 107-116.

Figley, C. R. (2002). Compassion fatigue: Psychotherapists' chronic lack of self

    care. *Journal of Clinical Psychology, 58*(11), 1433-1441.

Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C. R. Figley, & C. R. Figley (Eds.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized.* (pp. 1-20). Philadelphia, PA US: Brunner/Mazel.

*Linley, A. P., Joseph, S., & Loumidis, K. (2005). Trauma work, sense of coherence, and positive and negative changes in therapists. *Psychotherapy & Psychosomatics, 74*(3), 185-188.

Linley, P. A., & Joseph, S. (2005). The human capacity for growth through adversity. *American Psychologist, 60*(3), 262-264.

*Marmaras, E., Lee, S. S., Siegel, H., & Reich, W. (2003). The relationship between attachment styles and vicarious traumatisation in female trauma therapists. *Journal of Prevention and Intervention in the Community, 26*(1), 81-92.

*McLean, S., Wade, T. D., & Encel, J. S. (2003). The contribution of therapist beliefs to psychological distress in therapists: An investigation of vicarious traumatisation, burnout and symptoms of avoidance and intrusion. *Behavioural and Cognitive Psychotherapy, 31*(4), 417-428.

Meadors, P., & Lamson, A. (2008). Compassion fatigue and secondary traumatisation: Provider self care on intensive care units for children. *Journal of Pediatric Health Care, 22*(1), 24-34.

Moulden, H. M., & Firestone, P. (2007). Vicarious traumatisation - the impact on therapists who work with sexual offenders. *Trauma Violence & Abuse, 8*(1), 67-83.

*Nelson-Gardell, D., & Harris, D. (2003). Childhood abuse history, secondary traumatic stress, and child welfare workers. *Child Welfare, 82*(1), 5-26.

Pearlman, L. A., & Saakvitne, K. W. (1995). *Constructivist self-development theory approach to treating therapists with vicarious traumatisation and secondary traumatic stress disorder*

Pearlman, L. A. (1995). Self-care for trauma therapists: Ameliorating vicarious traumatisation. In B. H. Stamm, & B. H. Stamm (Eds.), *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators.* (pp. 51-64). Baltimore, MD US: The Sidran Press.

Rothschild, B. (2006). *Help for the helper: The psychophysiology of compassion fatigue and vicarious trauma*. New York, NY US: W W Norton & Co.

Sabin-Farrell, R., & Turpin, G. (2003). Vicarious traumatisation: Implications for the mental health of health workers?. *Clinical Psychology Review, 23*(3), 449-480.

Salston, M., & Figley, C. R. (2003). Secondary traumatic stress effects of working with survivors of criminal victimization. *Journal of Traumatic Stress, 16*(2), 167-174.

*Simon, C. E., Pryce, J. G., Roff, L. L., & Klemmack, D. (2005). Secondary traumatic stress and oncology social work: Protecting compassion from fatigue and compromising the worker's worldview. *Journal of Psychosocial Oncology, 23*(4), 1-14.

Sinclair, H. A., & Hamill, C. (2007). Does vicarious traumatisation affect oncology nurses? A literature review. *European Journal of Oncology Nursing, 11*(4), 348-356.

*Sprang, G., Clark, J. J., & Whitt-Woosley, A. (2007). Compassion fatigue, compassion satisfaction, and burnout: Factors impacting a professional's quality of life. *Journal of Loss & Trauma, 12*(3), 259-280.

Warren, T., Lee, S., & Saunders, S. (2003). Factors influencing experienced distress and attitude toward trauma by emergency medicine practitioners. *Journal of Clinical Psychology in Medical Settings, 10*(4), 293-296.

Section 2- Research Report

Secondary Traumatisation and Adversarial Growth: the Effects of Clinical Psychologist's work on their Well-being.

Abstract

The current study used a National Survey methodology to investigate the effects of

the work in terms of secondary traumatisation and adversarial growth on a sample

of 119 Clinical Psychologists, working in the UK. The extent to which Clinical

Psychologists are reporting these effects was investigated, in relation to the concepts

of Secondary Traumatisation and Adversarial Growth, measured using the

Secondary Traumatic Stress Scale and the Post-Traumatic Growth Inventory.

Secondly, focus was given to exploring the influence of four factors of social

support, organisational support, team support and the supervisory relationship upon

outcomes. Thirdly, the impact of the use of different theoretical models on

outcomes was explored. Demographics were controlled for in the analyses, which

used hierarchical multiple regression to predict outcomes. Neither the four factors,

nor the use of theoretical models were found to significantly predict either outcome.

However, certain factors were identified as showing a trend with outcomes, and

these were most notably, experience of recent personal stress and exposure factors.

These findings are interpreted in relation to research in the area of PTSD, secondary trauma, resilience, coping, and growth. The implications of the findings for the profession of Clinical Psychology are discussed, along with limitations of the research design, and suggestions for further investigation.

1.0 INTRODUCTION

To fully explore the relevant factors contextualising this piece of research, many strands need to be discussed and brought together, before focusing on the rationale and aims of the current study. These factors are shaped by an agenda centring on well-being at work, specific issues around employment in large public service such as the National Health Service (NHS) and how the work conducted in this context can affect well-being of employees, via exposure to traumatogenic material. Consequences for employees such as secondary traumatisation and posttraumatic or adversarial growth will be discussed as possible outcomes from trauma experiences with a specific focus on the impact of such work for Clinical Psychologists.

1.1 Well-Being at Work

The Health and Safety at Work Act 1974 determines that employers have legal responsibilities to ensure the health and well-being of their employees, and has initiated greater policy and research interest in optimizing employees' well-being in the work place, not least through increasing awareness that staff ill health adversely affects productivity (Health & Safety Executive, 2009). Staff distress is now arguably the most significant challenge for public sector organisations attempting to provide value for money given one in five workers report feeling extremely stressed at work, equating to 5 million in the UK alone (Health & Safety Executive, 2009). Self-reported work-related stress, depression or anxiety account for an estimated 10.5 million reported lost working days per year in UK and appears to be rising (National Institute for Health & Clinical Excellence, 2009).

The cost of reduced productivity through sickness absence is magnified via early retirement, increased staff turnover, and the consequent needs to recruit and train new personnel (Chartered Institute of Personnel & Development, 2009). Evidence also shows that productivity can be reduced through the lower level of performance of employees who are at work but experiencing stress or mental health problems. This is known as 'presenteeism'. A recent report estimated that impaired work efficiency associated with mental heath problems costs £15.1 billion a year, which is almost twice the estimated annual cost of absenteeism (£8.4 billion). (National Institute for Health & Clinical Excellence, 2009)

Any stress can reduce employee well-being, and it is well recognised that excessive or sustained work pressure can lead to stress, ordinarily in the form of

burnout. In an absence management survey conducted by the Chartered Institute of Personnel and Development (CIPD), 2008 found that just under a third of organisations surveyed reported an increase in work-related stress compared with the previous year. The average length of time an individual takes off work with stress was found to be 21 days by a recent report (CIPD, 2007). Occupational stress poses a risk to most businesses and compensation payments for stress are increasing. As part of their overall strategy to reduce work-related ill-health, the HSE has developed some clear guidance on stress management standards (Health & Safety Executive, 2004) encouraging organisations to take preventative measures through comprehensive risk assessment of factors which can adversely affect their employees' occupational wellbeing.

1.12 Working in the National Health Service (NHS)

The NHS is one of the world's largest employers and the health and well-being of its workforce, which accounts for a significant proportion of the UK working population, is crucial to its optimal functioning (NHS, 2009). While important steps have been made to enhance awareness of the influence of staff health on patient care, and areas of excellent practice already exist, scope for improvement remains, with emphatic feedback from staff suggesting their health and well-being is still insufficiently important to their employer (NHS, 2009).

Staff health and well-being are understood to be more than just the absence of disease, putting emphasis on achieving physical, mental and social contentment, and ideally personal growth and development, through work (CIPD, 2007). Aside from

the obvious human desire to promote well-being, there is a strong business case for investing in staff health and well-being. Organisations that prioritise this perform better, with improved patient satisfaction and outcomes, higher levels of staff retention and lower rates of sickness absence (CIPD, 2009).

The NHS faces significant challenges in the coming years and the health of those who deliver care to patients will increasingly play a key part in enabling it to meet its aspirations It is therefore crucial that this issue be addressed. In particular, it is clear that healthcare in the future will have a stronger preventative emphasis than in the past, and if the NHS is to be seen to model this, it is important that the organisation and its staff take action to reduce their own risk factors.

Increasingly, there are high levels of exposure to traumatic experiences and/or material in those working in health services, both in managing individuals who are distressed and those suffering loss or death. Until recently, this has been investigated more widely in relation to emergency personnel, where these experiences may seem more intense and frequent (Clohessy & Ehlers, 1999), but there is evidence that institutionally-based health professionals also suffer comparable levels of distress in response to exposure to traumatogenic material (Robertson & Perry, in press).

1.2 Trauma

Post-Traumatic Stress Disorder (PTSD) was officially recognised as a diagnostic category of anxiety disorder in 1980. The diagnostic criteria specifies

that an individual has to have experienced an event that is "outside the range of usual human experience" (DSM-III, American Psychiatric Association), and display symptoms across intrusion, avoidance and arousal factors for the minimum of a month (See Appendix for full diagnostic criteria).

Some individuals appear more vulnerable than others following exposure to traumatic experiences. Some who experience trauma do not develop adverse symptoms, or they recover from them quickly (Brewin, Andrews & Valentine, 2000). This has led to a growing research focus on possible predictive and protective factors for PTSD. Currently findings are both contradictory and equivocal and leaders in the field have argued not for a single cause but multiple causal pathways (Kraemer et al., 1997).

Within PTSD research, risk factors have been classified into those of psychosocial, genetic and biological origin. Psychosocial dimensions have included features of the traumatic event itself, pre-existing personality characteristics or experiences of the trauma victim, and post-trauma circumstances/events. A number of researchers have found a 'dose-response' relationship (Rodriguez et al., 1998; Fairbank et al., 1983), suggesting that the extent of the trauma experience is related to the extent of the symptoms presented. Regarding pre-existing attributes, being of female gender, younger age, lower socio-economic status, lower education, lower intelligence, and minority racial or ethnic status appear to confer increased risk (Brewin et al., 2000; King et al., 2004).

In relation to post-trauma experiences, researchers have focused on two main categories: lack of social support, and exposure to additional life stressors. It is well established in the literature base that a lack of social support is a risk factor for the development of PTSD, offering the strongest association revealed a meta-analysis of research, with additional life stressors representing the next highest effect size (Brewin et al., 2000).

1.2.1 Secondary Traumatisation (ST)

The last two decades has witnessed increasing recognition of a 'cost to caring' (Figley, 1995), such that those within health or social care professions, as well as informal carers, may suffer effects to their personal well-being as a result of the work they undertake. The parameters of DSM IV diagnostic criteria have broadened such that symptoms of PTSD can be experienced by a close friend or family member following hearing about traumatic events (American Psychiatric Association, 2004).

It has been proposed that this may be extended to include therapists who are also exposed to individuals' traumatic material in their work. Trauma work can be defined as any work with individuals who have suffered traumatic events of either a physical or psychological nature, resulting in some extent of psychological difficulties. There have been varied ways of conceptualizing these secondary effects

on professionals, and these are outlined below to facilitate understanding of the
history and clarity of the concepts, which are often used interchangeably in the
literature.

1.2.2 Compassion Fatigue (CF)

The earliest constructions of compassion fatigue understood it as a particular
form of burnout (the state of mental, physical and emotional exhaustion, which can
result from cumulative exposure to emotionally demanding situations) relating to
the caring professions (Joinson, 1992). However, Figley later defined 'Compassion
Fatigue' as a variety of symptoms and emotional responses resulting from work
with survivors of trauma significantly depleting professionals' capacity or interest
to contain others' suffering (Figley, 1995). It was also argued that it results from a
natural empathic response to vulnerable, suffering clients and that the most
competent therapists/caregivers may be most vulnerable due to their capacity for
expressing empathy (Salston & Figley, 2003). Increasingly the concept has become
used interchangeably with that of secondary traumatisation, with a focus on a
variety of symptoms and emotional responses resulting from work with survivors of
trauma.

1.2.3. Secondary Traumatic Stress (STS)

This has been constructed as a form of secondary traumatic stress reaction, which may include psychological symptoms which are argued to cluster into the same categories as those for PTSD, in line with DSM-IV categories of avoidance, arousal and intrusion, and may include flashbacks, nightmares, sleeplessness, avoidance of certain places/people and fear (Figley, 2002; Bride, 2003). Figley defined the phenomenon as: "the natural consequent behaviours and emotions resulting from knowing about the traumatising event experienced by a significant other - the stress resulting from helping or wanting to help a traumatized or suffering person." (Figley, 1995b, P. 7). There have been further constructions of distress, most notably that of vicarious traumatisation (McCann & Pearlman, 1990), described below.

1.2.4. Vicarious Traumatisation (VT)

Vicarious Traumatisation was initially described as: 'the transformation in the inner experience of the therapist that comes about as a result of the empathic engagement with clients' trauma material.' (McCann & Pearlman, 1990). 'Vicarious' acknowledges that the therapist may experience parts of the client's trauma as if it had happened to them. A comprehensive conceptual framework for understanding the phenomenon is embodied in Constructivist Self Development Theory (CSDT) (McCann & Pearlman, 1990), an interactive model, emphasising the individual nature of the experience of trauma. Central to this model of distress, and distinguishing it from STS and CF are disruptions to a professional's cognitive schema about the self and others, changing one's self- identity and view of the

world. McCann and Pearlman indicated that disruptions may occur in five fundamental need areas; safety, esteem, trust/dependency, control and intimacy. Thus, therapists may construe a more dangerous and threatening world because of others repeated disclosure to them of traumatic events.

Although they could be argued to be somewhat distinct, in many ways, the concepts of Compassion Fatigue, Vicarious Traumatisation and Secondary Traumatic Stress have been pulled together in research under the rubric of Secondary Traumatisation (ST). As discussed, Secondary Traumatic Stress is a construct consisting of demonstrable secondary trauma symptoms, including arousal, avoidance and intrusion, in health professionals as a result of working with individual's who have experienced trauma. Compassion Fatigue is now considered to be a specific form of STS (Figley, 2002). Vicarious Traumatisation is a construct which extends these effects further, suggesting in addition to the presentation of trauma symptomatology in these workers, there will be resultant changes in schema about the self, others and the world, effectively a changing of world views.

The existence of VT as a separate concept has been debated (Sabin-Farrell & Turpin, 2003). In addition, there are difficulties in measuring VT methodologically, due to its emphasis on changes in schema. The focus on adverse effects in the current study will be conceptualised in line with ST due to this being a more well-established construct which is more easily measured.

1.3 Impact on Therapists

Therapeutic engagement with traumatized clients may affect professionals as therapists and as human beings, due to the strength of the empathic response (Pearlman & Saakvitne, 1995). Trauma work places special demands on a therapist for several possible reasons: it confronts them with the reality of painfully traumatic events, which are often masked in other social engagement; repeated exposure increases awareness of the potential for trauma in their own lives; it may remind them of their own painful and traumatic experiences and a therapist's identity may be threatened by the positions particular clients who have suffered trauma place them in within the therapeutic relationship, in terms of their reactions in therapy. Listening to trauma stories forces the therapist to be a helpless witness to damaging and often cruel events, challenging their 'helper' identities (Figley, 1995). Such experiences may profoundly influence the therapist's sense of self and beliefs about the world and the people in it.

It has been suggested that there are two sets of factors which contribute to secondary traumatisation. Firstly, specific characteristics of clients, the nature of the work, and the political, social and cultural context of both the events and the work. Secondly, specific characteristics and vulnerabilities of the therapist, and the way in which they work (Figley, 1995; Pearlman, 1996). Consideration of these is required in terms of minimising the adverse impact on therapists.

1.4 Growth

Whilst pathological responses may result from exposure to traumatic material, there is a growing body of psychological evidence demonstrating that positive psychological changes can also accompany stressful and traumatic events (Linley & Joseph, 2007; Tedeschi & Calhoun, 2004). This is a relatively recent line of empirical investigation, although it has a rich history in philosophy and literature and in humanistically and existentially-oriented psychotherapy. It is reported that 40-70% of individuals who experience a traumatic event, later report some benefit from these experiences.

1.4.1 Adversarial Growth

Growth following adversity has been described in different ways; posttraumatic growth, stress-related growth, thriving, but will be termed adversarial growth throughout this paper for ease of understanding, due to recent conceptualisations (Linley & Joseph, 2007). It has been proposed to comprise three commonly reported elements; enhancements in relationships (the value placed on them), changes in views of self, and changes in life philosophy (for example, a changing of priorities, goals, appreciation of life) (Tedeschi & Calhoun, 1999; Joseph & Linley, 2005). Growth has been reported in response to many different types of trauma, including bereavement, serious illness, accidents and abuse. However, there is still debate whether validity of self-reported growth reflect actual life changes (Frazier & Kaler, 2006).

1.4.2 Positive Changes in Outlook

In individuals who have experienced trauma themselves, it has been found that positive changes in outlook (individual's views of themselves and the world) predicted lower levels of PTSD symptoms, depression and anxiety over a six month post trauma period (Linley et al., 2008) -suggestive of a protective influence. The authors explained their findings in relation to meaning-making in cognitive-emotional processing following trauma's consequence of shattering assumptions. Positive changes tend to relate to an increased sense of new meanings and adjustment which overcomes the confusion and disruption characterised by PTSD (Joseph & Linley, 2005, 2008).

1.4.3 Compassion Satisfaction (CS)

The positive effects of working in health professions specifically has been termed compassion satisfaction, used to describe the accomplishment derived from the work of helping others (Stamm, 1997). Some positive factors may provide protective mechanisms to some degree for trauma workers making them less vulnerable to adverse effects of the work (Dunkley & Whelan, 2006), although this is not definitive (Bonnano, 2005). However, certain factors have been found to have a relationship with both increased growth and reduced distress symptomatology, for example, higher levels of experience and training were linked to higher personal accomplishment but also lower distress symptoms (Baird & Jenkins, 2003).

Growth is an often overlooked dimension of PTSD models, with their focus on pathology, yet Linley and Joseph's proposed 'Organismic Valuing Theory of

Growth Through Adversity' takes into account both the negative and positive changes that can occur following traumatic experiences, with a focus on the drive for growth. An important factor within this model is that for growth to be enabled following adversity, an individual's social support is key. Growth has been reported in therapists who are not themselves directly exposed to any danger from life-threatening events, but appear to vicariously grow as a result of exposure to client's experiences (Linley, Joseph & Loumidis, 2007; Baird & Jenkins, 2003).

1.5 Evidence Base for Positive and Adverse Effects in Health Professionals

1.5.1 Risk Factors

Certain factors have been found to correlate with increased levels of distress reported in health professionals. In relation to exposure to traumatogenic material, both caseload and hours worked have been found linked with higher negative symptoms (Baird & Jenkins, 2003; Brady et al., 1999; Devilly et al., 2008; McLean et al., 2003; Sprang et al., 2007). Length of experience, and thereby cumulative exposure has been found to have a similar relationship (Linley & Joseph, 2007), or conversely, less experience and less specific training has been linked to higher distress (Adams & Riggs, 2008; McLean et al., 2003; Sprang et al., 2007). Certain therapeutic orientations have been linked to higher distress, for example, psychodynamic or analytic (Deighton et al., 2007) or lower positive changes for cognitive behavioural therapists (Linley & Joseph, 2007), although

mechanisms have been unexamined. Female gender and younger age also appear to increase vulnerability to higher distress (Sprang et al., 2007).

1.5.2 Mitigating factors

Equally certain factors have been linked with lower levels of distress, suggesting a possible preventative role in STS. A relationship between higher caseloads and clinical hours worked and lower negative symptoms has been found (Baird & Jenkins, 2003), but the opposite of lower exposure in terms of caseload and hours with trauma work and lower distress (Brady et al., 1999). Perceived interpersonal support was found linked with lower distress (Devilly et al., 2008), as was strong supervisory relationships (Dunkley & Whelan, 2006).

1.5.3 Growth

In relation to growth, relationships between certain factors and levels of growth have also been evidenced in prior research, although these are far less researched. More experienced trauma workers have reported greater personal accomplishment (Baird & Jenkins, 2003); increased exposure has been linked with spiritual well-being (Brady et al., 1999); and the use of personal therapy and regular supervision linked with growth (Linley & Joseph, 2007). Females have shown higher growth, as have those working from a transpersonal therapeutic orientation and those with higher current caseloads (Linley & Joseph, 2007).

1.54 Overview of evidence

Research to date reveals strengthening evidence for factors relating to risk, prevention and growth for professionals working with individuals who have experienced trauma. Many of the studies have taken a very broad conceptual approach and there have been significant methodological issues with the majority of work in the area making it difficult to draw clear conclusions from the literature. Most notably, sampling issues have limited generalisability of the findings, and with the phenomena operationalised variably, comparison of studies is compromised.

Disappointingly, there are few UK-based studies, so these issues have been rather neglected for the many practitioners working in mental health within the NHS. However, evidence for the existence of STS symptoms is present and growing, as are relationships with certain risk and preventative factors, which need further clarification. The evidence so far relating to positive changes and personal growth as a result of the work is inspiring and provides a more comprehensive picture. Further investigation is needed to be able to inform practice and indeed professional training in order to minimize the negative effects of the work and increase mental well-being of professionals.

To date no study has reported exclusively on effects for Clinical Psychologists yet they are very likely to work with trauma of varied kinds and in varied contexts. Linley and Joseph (2007) included them in their sample, but it consisted mainly of Counselling Psychologists. Other researchers have focused on social workers (Nelson-Gardell & Harris, 2003; Simon et al., 2005), therapists

(McLean et al., 2003; Marmaras et al., 2003; Brady et al., 1999; Adams & Riggs, 2008), counsellors (Dunkley et al., 2006; Baird & Jenkins, 2003), or mixed mental health professional samples (Deighton et al., 2007; Devilly et al., 2008; Sprang et al., 2007

1.6 Working as a Clinical Psychologist

Clinical Psychologists' roles vary; however direct clinical contact constitutes a substantial element of work for the majority, potentially including extensive exposure to traumatogenic material through working with individuals who have experienced trauma across many clinical domains, not just trauma-specific work. They are trained, and therefore work, across several theoretical disciplines, which could be argued to differ from many other mental health professionals, making them an exclusive group. There are numerous additional pressures and expectations within their roles, creating a somewhat unique work context. The training route, emphasis on scientific research and the role of supervision at all stages of the career differs from other professions. In their supervisory capacities, they are likely to deal with clients' trauma from their supervisees' caseload, and any reactions of the clinicians they supervise to this difficult work, including trainees, in addition to their own clinical work.

Increasingly, Clinical Psychologists are expected to take on leadership responsibilities and a more consultative role within multi-disciplinary teams (New Ways of Working, BPS, 2007). In recent times, the profession has been

experiencing significant changes due to the growth of other applied psychology roles and new initiatives, such as, Improving Access to Psychological Therapies (IAPT). This has had an impact on the resources available for Clinical Psychologists and indeed a reduction in the growth of Clinical Psychology departments, leading to higher demands and increased isolation for individual clinicians in some service areas.

1.7 Rationale for Present Study

Varied research, most with significant methodological difficulties, has been undertaken on different professionals, focusing mainly on symptoms of distress. Clinical Psychologists have not been investigated as a unique group of professionals, and few studies have considered adversarial growth.

The current study will focus exclusively on Clinical Psychologists, including exploration of the deficits of working in isolation, and factors which may be considered to influence the impact of this, given previous research findings on determinants of trauma, secondary traumatisation and adversarial growth. The specific factors chosen for investigation are organisational support, social support, team alliance, and the quality of the supervisory relationship. Although social support has been considered previously (Linley & Joseph, 2007), little emphasis has been placed on other support elements within a person's work context, for example, the team, organisation itself, or supervisor.

The influence of a therapist's theoretical orientation in terms of vulnerability or growth will be investigated due to its tentative role in earlier research (Linley & Joseph, 2007; Sprang et el., 2007). Therapists primarily using a cognitive behaviour therapy (CBT) model reported significantly less personal growth and positive change (Linley & Joseph, 2007). Therapists working within psychodynamic or psychoanalytic models were found to be more vulnerable to distress (Deighton et al., 2007) and those working within a transpersonal framework were found to show higher levels of growth (Linley & Joseph, 2007). Differences across theoretical orientations have had limited exploration, yet this is very relevant to a sample of Clinical Psychologists due to their use of different approaches and the major pressure for them to provide CBT for many diverse problems, as opposed to other models, following NICE guidelines and the Improving Access to Psychological Therapies (IAPT) current agenda.

Other information acquired in the current study, for example, demographics, exposure, personal therapy and recent personal stress, are included due to previous research showing that these may have relationships with outcomes (Linley & Joseph, 2007; Sprang et al., 2007; Deighton et al., 2007; Baird & Jenkins, 2003). Findings for these have been equivocal, but they are included to enable control of possible influence of these variables.

1.8 Research Questions

1.8.1 Objectives

* To investigate whether and to what extent of Clinical Psychologists report secondary traumatic stress and/or adversarial growth as a consequence of their work.

* To explore whether organisational support, team alliance, supervisory alliance and social support are predictive of STS and adversarial growth.

* To explore the influence of a Clinical Psychologist's primary theoretical orientation on outcomes of STS or growth.

1.8.2 Research Questions

1- **Are Clinical Psychologists experiencing STS, and if so, to what extent, as a consequence of the work?**

2- **Are Clinical Psychologists reporting adversarial growth, and if so, to what extent, as a consequence of the work?**

3- **Are the factors of organisational support, social support, team support and supervisory alliance predictive of outcomes of STS?**

4- **Are the factors of organisational support, social support, team support and supervisory alliance predictive of outcomes of adversarial growth?**

5- **Is the primary theoretical model employed predictive of STS?**

6- **Is the primary theoretical model employed predictive of adversarial growth?**

2.0 METHOD

2.1. Study Design

A cross sectional, quantitative national survey to investigate the extent of, and influences on, secondary traumatic stress and adversarial growth in Clinical Psychologists, was used issuing a questionnaire booklet of measures.

2.2 Methodology

2.2.3 Participants

Participants comprised 119 (20 male, 99 female) qualified Clinical Psychologists, currently employed, full or part-time, at the time of recruitment for the study. Almost all of the sample (99%) were employed primarily in the National Health Service, and comprised Clinical Psychologists from across the UK, working in several different types of services (see Results section), and using different theoretical models in their work.

The sample was taken from Clinical Psychologists targeted for recruitment through The British Psychological Society (BPS) Division of Clinical Psychology (DCP) email lists at regional, managerial and specialty level. Recruitment was targeted at Clinical Psychologists working across the range of specialisms. An email giving brief details of the study (See Appendix) was circulated through these lists with participants asked to reply if they were interested in taking part. Respondents were included if they were employed currently in the role of Clinical Psychologist (not in other applied psychology roles), and that they were working in the UK. These criteria were chosen to mitigate the influence of different expectations and employment contexts.

2.2.3.1 Payment for Participants

Participation was encouraged via respondent's entry to a prize draw potentially winning £50 of Amazon vouchers. A prize draw information slip and separate envelope was included in the survey packs to enable participants to enter the prize draw without exposing their identity on the questionnaire answers.

2.2.3.2 Obtaining Consent

In line with COREC guidelines, an Information Sheet attempted to ensure that respondents understood that completion and return of the questionnaire implied that they gave consent to involvement in the study. The information sheet described the aims of the research, what taking part entailed and assurances about how anonymity and confidentiality would be achieved (See Appendix).

The methodology was considered the most appropriate given success of the use of questionnaires in previous research in this area (Linley & Joseph, 2007; Sprang et al., 2007). In addition, the brief time required for completion increased the likelihood of participants responding and enabled a larger number of participants to be sampled, increasing the potential generalisability of findings. Use of questionnaires requiring self-report on symptomatology was also felt to be less intrusive than face-to-face interviews. It was hoped to encourage professionals to answer honestly by minimising concerns for exposure. It also enabled them to withdraw at any time whilst completing the questionnaires if any distress was felt.

2.3 Procedure

Subsequent to indicating that they were interested in participating, potential respondents were sent study packs, comprising of a Participant Information Sheet, a sheet to elicit demographic and personal details, and five questionnaires. Following a pilot, undertaken by the author it was expected that the pack would take about 20 minutes to complete. A prize draw Information Sheet and an additional return envelope were included (See Appendix). After respondents completed questionnaires, they were returned in a pre paid envelope and respondents were not obliged to have any further contact with the researcher.

It was intended that a reminder letter would be sent out to all volunteers one month after the initial packs were sent out, but due to the positive response rate this was not necessary.

2.4 Power Calculation

An apriori power calculation was undertaken to estimate the desired sample size for the primary questions. The statistical significance criterion was set at 0.05 and the power level was set at the standard convention of 0.80 (Cohen, 1988). This was calculated using both primary outcome measures, the STSS and the PTGI, each considered separately.

Sample size was calculated based on the comparison of PTGI scores between a 'traumatised' group and 'non-traumatised' group of individuals taken from previous research by the authors of the measure (Tedeschi & Calhoun, 1996). To detect a statistically significant difference, with 80% power at the 5% significance level, whereby the 'traumatised' group scored 83.16 (SD 19.27) and the 'non-traumatised' group scored 69.75 (SD 20.47), 35 individuals were required per group. For this study only a 'secondary traumatised' group were to be sampled (Clinical Psychologists), to be compared against a predicted population average of 'non-traumatised' individuals, therefore only requiring 35 individuals in total.

The same process was applied regarding the STSS, following Brian Bride's advice regarding appropriate use of means; based on the comparison of a 'secondary traumatised' Social Worker sample, scoring 29.49 (SD 10.76), and a 'non-traumatised' sample, scoring 21 (SD 10.76), twenty seven participants were deemed sufficient to achieve power. The expected values were taken from, 'Development and Validation of the Secondary Traumatic Stress Scale' (Bride et al., 2004).

To summarise, to address the primary research questions, 35 individuals were required. However, given reduction in power when exploring secondary research questions, statistical advice suggested seeking a larger sample of at least 100, consequently an actual sample of 119 participants was achieved.

2.5 Materials

To address the research questions, the following materials were selected.

1) Secondary Traumatic Stress Scale (STSS; Bride et al., 1979)

The STSS was chosen to assess secondary PTSD symptoms of intrusion, avoidance and hyper arousal in clinicians, over the last 7 days. It is a 17-item measure using a five-point Likert scale with responses ranging from 1-5, across three subscales for intrusion, avoidance and arousal. The full-scale has a maximum score of 85, and a minimum score of 17. In a reported sample of social workers exposed to client's experiencing trauma, a mean score of 29.49 was attained (Bride, 2004). A score higher than this would be expected for primarily traumatised populations. Advice was sought regarding an expected score for a 'non-traumatised' general population, with 17 recommended by the author (Bride, 2008), and used for comparisons with the data from the current study.

The scale includes items such as, "My heart started pounding when I thought about my work with clients," and, "I wanted to avoid working with some clients." Reliability scores reported for constituent elements were; Intrusion (α= 0.80), Avoidance (α=0.87), Arousal (α= 0.83), Full Scale (α= 0.93). Appropriate factor, convergent and discriminate construct validity are reported (Bride et al., 2004).

2) Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996)

The PTGI was chosen as to measure growth following trauma or adversity. Used previously in evaluation of secondary trauma (Linley & Joseph, 2007), it is designed to study changes in five areas of life; New Possibilities, Relating to others,

Personal Strength, Spiritual Change, and Appreciation of Life. It comprises a 21-item, six-point Likert scale, with responses ranging from 0-5, producing a potential score range of 0-105. The samples reported in the development of the measure demonstrated a score of 69.75 for non-traumatised populations and 83.17 for primarily traumatised populations. Items include, changes in; "A willingness to express my emotions," and, "A better understanding of spiritual matters." Reliability scores reported are; New Possibilities ($\alpha=0.84$), Relating to Others ($\alpha=0.85$), Personal Strength ($\alpha=0.72$), Spiritual Change ($\alpha=0.85$), Appreciation of life ($\alpha=0.67$), Full scale ($\alpha=0.90$). Again, full scale scores will be the focus here. Acceptable test-retest reliability and construct validity have been reported (Tedeschi & Calhoun, 1996).

3) Crisis Support Scale Short Form (CSS; Joseph et al., 1992)

The Crisis Support Scale was included in order to investigate the potential role of social support in mediating effects of the work. This scale examines support at the time of and following trauma. It comprises a six-item, seven-point Likert scale, with responses ranging from 1-7, creating a potential score range of 6 to 42. Items include; "Are people helpful in a practical sort of way?" and, "Are you able to talk about your feelings?" The reliability score for the full scale version was reported as $\alpha=0.82$, with good discriminatory validity reported (Elklit et al., 2001). In terms of construct validity, the CSS measures multi-factorial aspects of social support not merely received support (Elklit et al., 2001). This multi-factorial nature did not present a problem for use in the current study.

4) Supervisory Working Alliance Inventory (SWAI; Efstation et al., 1990)

The SWAI was chosen to measure the supervisory alliance between respondents and their clinical supervisors, using the 'supervisee' part of the measure. It was used to examine how well supported and contained respondents felt within their primary supervisory relationship. It is a 19-item measure, using a five-point Likert scale, ranging from 1-5, with a score range of 19-95. Convergent and divergent validity are reported as acceptable and an internal reliability was reported as $\alpha=0.90$, and $\alpha=0.77$ for both scales (Efstation et al., 1990).

5) Eight-item Survey of Perceived Organisational Support (SPOS; Eisenberger et al., 1986)

This measure was included to examine the organisational support an individual may feel they receive, which may be a protective factor for potentially aversive effects of the work. Reliability for the full scale was reported as $\alpha= 0.95$ (Shore & Tetrick, 1991).

6) Team Support

A set of questions designed by the first author was included to measure team support, as part of the study's aim to look at different aspects of support and how these may relate to outcomes. These questions produced a score range of 4 to 20. (See Appendix)

In addition to the above measures, there were a series of questions included designed to elicit demographic, general work and personal factors, which may have

influence on the factors being investigated (See Appendix). These were included so that potential effects of these variables (some of which have been noted to influence effects of the work in previous studies) could be controlled for in the analysis. Questions included around therapeutic modality emerged directly from the research questions being examined.

2.6 Ethical considerations

Given the risk of respondents being adversely affected by reflecting on the potentially distressing aspects of their work through completion of the study measures, advice was included in guidance material, included directing respondents to supportive services/professionals, occupational health, work-based counselling, general practitioner services, or a clinical supervisor.

Respondents were reminded that they could withdraw from the study at any time before returning the material. All responses were made anonymously to ensure confidentiality, and minimise personal consequences for respondents from their responses i.e. concerns over exposure of personal or difficult feelings. Respondents were given email contact details to obtain a summary of the findings if they so wished, and many requested this.

2.7 Statistical Procedure

Data were screened and analysed using the Statistics for the Social Sciences (SPSS) version 16. In order to examine the primary research questions, mean scores

were calculated for levels of STSS and PTGI in the sample and compared to those reported in previous 'traumatised' and 'non-traumatised' samples (Bride, 2004; Tedeschi & Calhoun, 1996). The four factors of social support, organisational support, supervisory alliance and team support correlations were checked to ensure that they were indeed measuring four specific factors without significant overlap. All values were below that of concern (0.7); the highest being 0.26 between team and organisational support. Data screening was conducted on all the variables, and descriptive statistics generated using frequency outputs, including checking for outliers, and ensuring assumptions concerning normal distribution, homogeneity of variance, and linearity were met.

The four factor scores from measures of organisational support, team alliance, supervisory alliance and social support were examined against the dependent variables of the STSS score and the PTGI scores separately. All other variables were coded where necessary and built into the regression model first in order to control for the effects of these on the DV's. Then two hierarchical multiple regression models were built up to look at the importance of each of the factors on the predictive influence of the two outcomes (STSS, Regression 1 and PTGI, Regression 2).

The data regarding the primary theoretical model used had a broad range, with some models only being reported by as few as two respondents (See Table 6). Therefore, to make the analyses more feasible, regression was not carried out and a descriptive analysis of means relating to both outcomes completed instead.

Collinearity diagnostics were examined for each model, including Tolerance, VIF, and Cook's values, to ensure the results were statistically sound. These investigations found no significant violations in the data.

3.0 Results

3.1 Response Rate

The response rate was 82% (120 of 146) after participants had declared interest by email. There was one exclusion, resulting in a reduction to 81.5%, because the participant had completed different measures based on different work positions that they held and it was felt that this could not be rectified in any way for analysis of the factors.

There was broad representation both from different services, and age ranges (See Table 1). Female gender was more highly represented than male, but this was in keeping with the gender split within the profession (DCP, 2008). Age ranges between 27 and 45 were the most highly represented (39%), with higher representation from certain service areas, notably, adult mental health, physical health, learning disability and children and adolescent mental health services.

Table 1- Demographics and service representation of sample

	Frequency	Percentage	Percentage Representation taken from DCP data
Gender			
Male	20	16.8	
Female	99	83.2	
Age (years)			
27-35	46	39	
36-45	43	36	
46-55	23	19	
56+	7	6	
Service Area			
Adult Mental Health	18	15.1	13.8
Early Intervention	9	7.6	No data
Physical Health	24	20.2	10.6
Crisis/Assertive Outreach	6	5	No data
IAPT	1	0.8	No data
CAMHS	10	8.4	12.4
Paediatric	7	5.9	No data
Acute care	3	2.5	No data
Forensic	5	4.2	5
Older Adults	2	1.7	10
Learning Disability	12	10.1	12.9
Child	3	2.5	No data
Adult	2	1.7	No data
Primary care	4	3.4	7.8

Looked After Children	3	2.5	No data
Ministry of Defence	1	0.8	No data
Neuropsychology	4	3.4	8.8
Substance Misuse	4	3.4	1.8
Trauma	1	0.8	No data

3.2 Research Questions

1- **Are Clinical Psychologists experiencing STS, and if so, to what extent, as a consequence of the work?**

Table 2. STSS scores

STSS Score	Number	Percentage
Non-Traumatised (< 17)	0	0
17-29.49	49	41
Secondarily Traumatised (>29.49)	70	59

On average, Clinical Psychologists in this sample were suffering from levels of STS higher than that of the general population, and than reported traumatised populations (Bride, 2004). The mean score on the STSS was 32, with a range of 35 (18-53), standard deviation 8.45. (See Figure 1 in Appendix for graphical representation). The result of 59% of the sample reporting secondary traumatisation may not be entirely generalisable to the profession as a whole due to the representation of service areas within this sample (See Table 1).

Table 3. STSS factor scores

STSS Factor (Max Score)	Mean Score	Secondary Traumatised Levels (Bride, 2004)	N scoring these level	Percentage scoring these levels
1.Intrusion (25)	9.48	>8.11	76	64
2.Avoidance (35)	12.65	>12.49	59	50
3.Arousal (25)	9.73	>8.89	71	60
Total (85)	32	>29.49	70	59

The most highly reported symptoms were those of intrusion (nightmares, thinking about clients when not wanting to), followed by arousal (sleeplessness, anxiety symptoms). Avoidance symptoms (avoiding certain places or people that reminded them of clients experiences) were the least reported, though still 50% of the sample were reporting these.

2- Are Clinical Psychologists reporting adversarial growth, and if so, to what extent, as a consequence of the work?

On average, Clinical Psychologists in this sample were not showing growth at levels equivalent to those studied previously as traumatised or non-traumatised samples (Tedeschi & Calhoun, 1996). The mean score on the PTGI was 47.49, with a range of 86 (0-86), SD 19.6. Some participants scores did fall into traumatised sample levels. (See Figure 2 in Appendix for graphical representation)

Table 4. PTGI factor scores

PTGI Factor (Max Score)	Mean	Mean Converted to Percentage of Max Score Available on Scale Factor
1.Relating to Others (35)	15.49	44
2.New Possibilities (25)	11.01	44
3.Personal Strength (20)	9.97	50
4.Spiritual Change (10)	2.47	25
5.Appreciation of Life (15)	8.71	58
Total (105)	47.49	45

A closer examination of individual factors scores, with mean scores converted to percentages of scores available on each factor, show that growth is reported more regularly in the areas of 'appreciation of life', and 'personal strength'. 'Spiritual changes' are reported the least, with only 25% of achievable growth in this area being reached on average (2.47 out of 10).

3- Are the factors of organisational support, social support, team support and supervisory alliance predictive of outcomes of STS?

Table 5. Results of multiple regression analysis predicting outcome from the four factors

Independent Variable	β	Adj. R^2	F	*p*	β	Adj. R^2	F	*p*
		STS				PTGI		
Step 1		0.027	1.16			0.08	1.53	
Gender	-0.03			0.98	-0.04			0.73
Age	0.12			0.52	0.08			0.60
CP Years	0.01			0.92	-0.04			0.72
Training	0.09			0.54	-0.24			0.09
Grade	-0.11			0.50	0.03			0.86
Hours	-0.17			0.14	**0.21**			**0.06**
Organisation	-0.14			0.25	0.15			0.20
Service	0.07			0.56	-0.05			0.65

Model Used	0.04			0.76	0.18			0.11
Supervision	0.09			0.49	-0.17			0.15
Supervise	0.02			0.85	0.01			0.91
Exposure 1	**0.20**			**0.09**	**-0.21**			**0.08**
Exposure 2	0.17			0.13	0.10			0.37
Personal Stress	**-0.21**			**0.08**	**-0.30**			**0.02**
Therapy Use	-0.10			0.39	-0.05			0.66
Step 2		0.079	2.01			0.05	0.28	
Team Support	**-0.16**			**0.06**	0.08			0.40
Social Support	-0.14			0.22	-0.01			0.88
Organisation Support	**-0.17**			**0.08**	0.06			0.51
Supervisory Alliance	-0.11			0.20	-0.05			0.71

The multiple regression analysis of the relationship between STSS scores and the four factors found no significant relationships. 19.7% of the variability in scores was accounted for by the controlled variables, and 8.6% by the four factors. However, 'Team Support' and 'Organisational Support' were showing the most significant predictions, though not quite reaching the acceptable level (0.05), as noted in bold in the table.

In terms of a closer examination of values for the controlled for variables, there were no statistically significant individual effects, but the greatest contributions came from exposure to recent personal stress (0.087 significance), exposure in terms of number of clients who have experienced trauma on caseload (0.096 significance).

4- Are the factors of organisational support, social support, team support and supervisory alliance predictive of outcomes of adversarial growth?

The multiple regression analysis of the relationship between PTGI scores and the four factors found no significant relationships. 24.4% of the variability of scores were accounted for by the controlled for variables, and only 1.2% by the four factors (See Table 5).

In terms of a closer examination of values for the controlled for variables, the variable of 'exposure to recent personal stress' had a significant relationship with PTGI Scores (0.015 significance). The greatest contributions after this were, 'exposure in terms of number of clients on the caseload' (0.76 significance with a negative relationship), and 'hours worked' (0.58 significance with a positive relationship).

5- Is the primary theoretical model employed predictive of STS?

The vast spread of primary therapeutic models reported resulted in regression analyses of this being statistically inappropriate for either outcome. Instead, a descriptive analysis of means was carried out from the data.

Table 6. Representation of therapeutic models used and outcome means

Model	n	Percentage	STSS Mean	PTGI Mean

Eclectic	44	37.0	32.1	45.3
Cognitive Behavioural Therapy (CBT)	29	24.4	30.6	46.1
CBT + Systemic	8	6.7	30.8	50.4
CBT + Cognitive Analytical Therapy	5	4.2	30.8	52.4
Personal Construct Therapy	3	2.5	26.0	40.7
Systemic	2	1.7	33.0	47.0
Attachment	3	2.5	37.0	29.7
Behavioural	2	1.7	43.5	58.5
Psychodynamic	3	2.5	39.3	35.7
CBT + other	6	5.0	27.8	46.2
Systemic + other	6	5.0	34.7	59.3
Psychodynamic + other	2	1.7	25.5	48.5
Other	6	5.0	32.2	58.2

The highest reported distress means were by those using behavioural, psychodynamic and attachment models primarily; and the lowest by those using Personal Construct Therapy, CBT in combination with another model, or Psychodynamic in combination with another model. However, the small number of respondents in each of these categories makes generalisation inappropriate.

6- **Is the primary theoretical model employed predictive of adversarial growth?**

As stated above, a descriptive analysis was carried out rather than a predictive analysis (see Table 6). The highest reported growth was by those using behavioural, systemic in combination with another model and 'other' models primarily; and the lowest by those using attachment, Psychodynamic and Personal Construct Therapy models. However, the small number of respondents in each of these categories makes generalisation inappropriate.

4.0 DISCUSSION

4.1 Contribution to the Area

This piece of research has succeeded in exploring the area of both STS and adversarial growth in relation to Clinical Psychologists (CP's) as a profession specifically. This is the first study to explore CP's exclusively, considering their distinct roles and responsibilities.

Other factors from prior findings in the literature have been further explored, including the influence of additional forms of support; social, team and organisational, and the supervisory alliance. These factors were not found to have significant predictive influence on either outcome for CP's. However, though not statistically significant, team and organisational supports showed the largest relationships with reduced distress.

4.2 Interpretation of main findings and relation to theory and practice

1- **Are Clinical Psychologists experiencing STS, and if so, to what extent, as a consequence of the work?**

The results showed an average level of STS higher than that of the general population, and a little higher than that of previously sampled secondarily traumatised populations (Bride, 2004). This may be of concern to CP's and the organisations that employ them given potential to adversely affect practice. 59 % of the sample showed levels above those reported previously, with none of the sample symptom free. Scores varied greatly, with some CP's reporting levels as high as 53, whilst others scored only 18. Those reporting elevated symptoms appeared troubled most by arousal and intrusion, with avoidance experienced by fewer CP's (See Table 2). However, compared to reported samples of Social Workers (Bride, 2004) and mental health providers (Sprang et al., 2007), this sample demonstrate higher average symptom distress. Disappointingly, many of the other studies in the area do not report the actual levels of distress themselves, only interaction with other variables precluding further analysis.

These levels of STS should not be ignored, and may well need to be considered by professionals in their own work and within organisations. Despite, their extensive training and access to supervision it appears impossible to avoid the negative effects to well-being from working with individuals who have experienced trauma. This fits theoretically with Figley's ideas around secondary traumatisation

being a natural consequence for health professionals showing empathy and working to alleviate distress with individuals who have experienced trauma (Figley, 1995).

2- Are Clinical Psychologists reporting adversarial growth, and if so, to what extent, as a consequence of the work?

On average, Clinical Psychologists in this sample did not show growth at levels equivalent to those studied previously as traumatised or non-traumatised samples (Tedeschi & Calhoun, 1996). This implies that CP's attribute less growth as a consequence of their work with trauma than those who have been primarily traumatised, or those from a sample who had not experienced any trauma (Tedeschi & Calhoun, 1996). The adequacy of this previous sample may provide partial explanation.

The 'non-traumatised' sample selected for use in the development of the PTGI was derived from university students in the US. The instructions were amended to ask respondents to rate 'the changes that had occurred to them during the past year.' (Tedeschi & Calhoun, 1996). Given that a sample of university students are likely to report higher levels of personal change (as a consequence of age, adjustment to greater levels of independence and autonomy from home and parents, and exposure to and assimilation within new social group) than a 'non-traumatised' sample taken from the general population. It seems unsurprising that CP's report lower levels of growth than this sample, regardless of their lack of experience of trauma.

The reliability of self-reporting of personal growth has also been questioned in terms of its actual reflection of changes in a person's life, as opposed to hypothetical changes only. Endorsement of growth on specific subscales of the PTGI was found to be unrelated to actual changes in corresponding areas of daily life (Frazier & Kaler, 2006).

In addition, within growth and resilience research, it has been suggested that self-reported change attributed to adversity often involves a derogation of past selves, helping the person to move on and find meaning (McFarland & Alvaro, 2000). It has been suggested that perhaps this reflects self-protective and self-enhancing processes, as opposed to actual life changes (Westphal & Bonanno, 2007). In CP's work, secondary trauma experiences may never be quite complete, as it is likely that a new case will be taken on with new traumatic material to deal with. In light of this, it could be questioned whether CP's are in a position to move on from the trauma and find meaning in the way that is described for individuals experiencing a single circumscribed traumatic event.

Emerging evidence suggests that more intense trauma experiences produce greater benefits, including growth (Stutts et al., 1995), again suggesting that the vicarious nature of listening to clients' traumatic experiences would be likely to lead to less growth than directly experiencing trauma. One of the explanations for increased benefit in the area of personal relationships, is that individuals exposed to trauma need to discuss these events, leading to them being more self-disclosing than they may have been before, opening up to more social supports and being willing to

accept help (Collins et al., 1990). It could be argued that a CP's professional boundaries may inhibit some of these responses, making growth less likely.

It is also suggested from research findings that more resilient individuals will not partake in the same meaning-making processes, which tend to be the mitigating factor for growth (Westphal & Bonanno, 2007). It is to be remembered that the majority of individuals exposed to potentially traumatic events continue to demonstrate a stable trajectory of healthy functioning in both personal and interpersonal areas over time, shown by the evidence from prospective studies (Bonanno et al., 2005, Deshields et al., 2006). Although, on average, the sample in this study were reporting lower levels of growth, there was a wide range between individuals, with some reporting levels as high as 86, significantly above the average of 47, reflecting these individual differences in response to trauma.

Given these factors, CP's may not be reporting levels of growth equivalent to other populations due to their increased awareness through critical knowledge and training, a lack of meaning-making processes due to the trauma being experienced indirectly through exposure to clients' material, coupled with a natural resilience trajectory built up through repeated exposure to clients' experiences. In addition, perhaps they attribute personal growth to other areas of life as opposed to work, which was the focus instructed to answer the PTGI questions in this study.

3- Are the factors of organisational support, social support, team support and supervisory alliance predictive of outcomes of STS?

Of the factors explored, experience of recent personal stress (0.08), and exposure (0.09) were the factors with the highest correlations with distress symptoms, though not at statistically significant levels. In addition, again not at significant levels, team (0.06) and organisational support (0.08) was showing a trend with reduced distress. This has implications for self-care, the supervisory process and organisations. Some limitations with the use of measures for these factors are discussed below.

4- Are the factors of organisational support, social support, team support and supervisory alliance predictive of outcomes of adversarial growth?

Of all the factors explored, experience of recent personal stress again had a relationship with growth also, at a statistically significant level (0.015). Exposure, in terms of the number of clients on the caseload who had experienced trauma, showed a trend at reducing levels of growth, but this was not at a statistically significant level (0.08).

4.3.1. Recent Personal Stress

CP's who reported experiencing recent personal stress showed higher levels of distress symptoms, but also higher levels of growth. It seems intuitive that professionals would be more vulnerable to adverse effects of the work when they are grappling with recent personal stresses. Though maintaining professional

boundaries in their work, clinicians are human and it seems impossible for them to be immune to the effects of difficult life experiences, such as serious illness, bereavement, divorce/separation, and other losses.

4.3.1.1 Relationship to previous research findings

These findings, in relation to the influence of personal stress, are in line with some of the previous research base: in trauma therapists (Deighton et al., 2007), and in therapists (Linley & Joseph, 2007). Other researchers did not consider personal stresses, and Mclean et al. (2003) found no relationship between recent personal trauma and adverse symptoms.

Reasons why professionals may become more vulnerable to adverse effects during times of recent personal difficulties, mirrors evidence from PTSD research (Brewin et al., 2000). CP's, may be cognitively searching for more meaning at these times, as has been linked with less resilience (Bonanno, 2007) and therefore a less healthy trajectory in the short-term, but added growth in the longer term (Linley & Joseph, 2007). The symptoms reported could relate more to their own personal distress as opposed to secondary traumatisation, or indeed an interaction between the two. This is difficult to unravel through the use of measures, but would fit with the increased growth shown which has been linked to personal meaning-making in other areas of research as discussed.

It would be interesting to monitor these professionals over time to explore outcomes in the future, after this meaning-making process is more complete, testing

if distress symptoms decrease over time and perhaps growth increased more significantly.

4.3.2 Exposure

Increased exposure in terms of the number of clients who had experienced trauma on the caseload was found to have a relationship with increased levels of STS, and reduced levels of growth. However, the number of hours worked was linked with reduced distress, and increased growth. Initially this presents a confusing overall picture, but there are possible explanations for the differences.

4.3.2.1 Relationship to Previous Research Findings

These findings appear consistent with some previous research; in psychotherapists (Brady et al., 1999); in mixed mental health professional samples (Devilly et al., 2008; McLean et al., 2003; Sprang et al., 2007), but contradict other findings, in trauma counsellors (Baird & Jenkins, 2003); in therapists in terms of growth (Linley & Joseph, 2007).

PTSD research, has articulated a 'dose-response' relationship, which could relate to the effects of increased exposure found here. The 'dose' is defined by the extent/severity of the traumatic experience, but it could be hypothesised that the response is increased similarly for CP's who hear cumulative reports of trauma, which could be construed as an increased 'dose', providing an explanation for the

higher levels of distress reported in those with more clients who have experienced trauma on their caseload.

The finding that increased hours (but not increased trauma clients on caseload) increased growth and reduced distress could be related to several issues; it suggests a better mix of caseload or work/clinical responsibilities which would reduce the cumulative effect of hearing stories of trauma; CP's may have more time for reflection and self-care within their work and by working more hours may be able to diffuse the effects of their workload better; consistent with this, they may have more time for meaning-making which may increase growth. An alternative explanation for this finding could be that those who are benefiting from their work would be more likely to take on extra hours, and perhaps less likely to choose to reduce their hours.

4.3.3 Multiple causal pathways?

The findings were quite circumscribed and equivocal, as with previous studies in the area, (Deighton et al., 2006; Linley & Joseph, 2007; Sprang et al., 2007) and consistent with a large cadre of research examining the diverse factors affecting presentation of PTSD (Brewin et al., 2000). There has been suggestion that this points to the idea that there are multiple causal pathways with some individual differences as opposed to clear and specific influencing factors (Kraemer et al., 2001).

This idea fits well with theory and research in the areas of stress and coping. The stress process, and factors influencing it, has been modeled as a dynamic interaction of different external influences and personal variables (Cassidy, 2000). Research in several areas suggests that individuals' vulnerability or resilience to various experiences which could predict negative outcomes, relies on multiple elements, including, personal characteristics, environmental influences, perceived power and control, and forms of support available. Due to this, investigation of individual factors may be expected to produce equivocal results, and arguably more complex models of interaction need to be further developed and explored.

5- Is the primary theoretical model employed predictive of STS?

Respondents were asked which theoretical model they employed primarily within their clinical work. There were no significant findings regarding influence of a clinician's theoretical model on distress symptoms. However, there were a very broad range of primary models reported, and often these were a combination of two (See Table 6). Due to this, a regression analysis was not carried out as it would have been statistically inappropriate to do so. A larger sample of respondents seems warranted to investigate this question more fully. More specific types and contexts for service delivery could be approached, where clinicians are using specific theoretical models in a pure form. However, these types of services are limited, especially for CP's who are trained across several models.

6- Is the primary theoretical model employed predictive of adversarial growth?

There were no significant findings in terms of an influence of clinician's theoretical model on levels of growth, and the previous findings relating to CBT therapists experiencing less growth (Linley & Joseph, 2007) were not supported.

4.2.4 Implications for practice

4.2.4.1 Training

CP's are currently required to undertake a three year Doctoral training course in the UK to be eligible to practise. The possible adverse effects of the work are not explicitly addressed on these training courses. Some Trainees may cover this within their clinical placements but this will vary according to the type of placements they undertake and their clinical supervisors' attitudes to or awareness of STS. This variability suggests that the training courses and the British Psychological Society (BPS) need to take responsibility for explicitly including teaching and awareness raising within their curriculum to ensure all Trainees have a grounding in these issues prior to qualification.

Additionally, benefit may be gained through normalising adverse effects for professionals struggling with negative symptoms, thereby reducing potential

perceived stigma and enabling appropriate support to be sought. CP as a profession

can be guilty of not advocating personal therapy and other forms of seeking support,

as opposed to similar professional training where this is made a prerequisite for

joining the programmes, for example, Counselling Psychologists and

Psychodynamic Psychotherapists.

4.2.4.1 Self-care

These findings raise the need to ensure extra focus is placed on self-care

during personally difficult times, with this being easier to achieve if healthy habits

are already in place. Maintaining healthy work/life boundaries, general healthy

living, exercise, sleep hygiene, meditation, and seeking support when needed, are all

suggestions for reducing vulnerability to adverse effects (Yassen, 1995).

4.2.4.2 Supervisory responsibilities

These issues need to be considered by individual clinicians for themselves,

but also by clinical supervisors, as they may be in a good position to be aware if a

supervisee is experiencing difficulties, and offer or suggest extra support, and

possibly a decreased workload, especially in terms of trauma caseload.

The supervisory relationship itself did not appear predictive of outcomes in

this study, though limitations in terms of the measure used are described below.

There has been evidence to suggest that irrespective of professional background,

supervision is regarded by almost all mental health staff as an important and

beneficial activity (Hummel & Koelmeyer, 1999; Reid et al., 1999). However, it is suggested that the personal support aspect of supervision is the part responsible for minimising work related stress, burnout and mental health problems of employees, including problematic emotions relating to clients and peers (Kadushin, 1992). In light of this, the question remains, are CP's using this part of supervision effectively? This seems particularly relevant to ask in regards to CP's on the basis that in a wider sample of therapists (not exclusively CP's), supervision was found to be an important factor in predicting outcomes (Linley & Joseph, 2007). The evidence is sparse in regard to whether supervision is actually effective in enhancing best practice and outcomes, despite there having been much written about the topic more generally (Spence et al., 2001).

Heads of departments could encourage more support by encouraging peer contact in the team generally, and having scheduled peer supervision sessions, regular department meetings and sufficient access to CPD events for all, so that CP's have a network of support around them in their work, where they can share and discuss positive and negative experiences with others who may experience similar issues.

Supervisors are also well placed to monitor a clinician's time management, and ability to access reflective and supportive forums within their work. From the findings relating to exposure, it may be that part-time workers need to be particularly monitored in this respect, as it may be more difficult for them to manage the different demands of the role and may result in them spending a higher

percentage of their time with trauma clients, and less time in reflection, supervision and CPD activities.

4.2.4.3 Organisational responsibilities

In terms of the wider organisation, acknowledgement of the likelihood of periods of increased strain and vulnerability to greater adverse effects should be made explicit. Organisations are legally bound to engage in duty of care to employees and far greater scrutiny of workload and balance are warranted, particularly since in other elements of the public sector these have been associated with catastrophic service failure, e.g. Baby P. In addition, increased avenues of support should be built into organisations, with easily accessible occupational health departments, and staff counselling options. More operational issues, such as, having adequate staffing levels and not keeping vacancies open for lengths of time will have an effect on both CP's support, and their exposure levels.

In addition to adequate resources, the arrangement of these needs to be considered in terms of the mix of clients that CP's have on their caseload. This will be influenced by strategic development of services, heads of department and clinical supervisors, and a clinician's own work interests, but it seems that working exclusively with clients who have experienced trauma will be likely to place CP's at risk. A more varied working caseload may be more beneficial, minimising adverse effects and maximising opportunities for growth. In light of the finding that CP's working increasing hours reported greater growth, it would be a shame if current

pressure to increase the number of contacts a CP sees, and thus reduce time for other professional activities ameliorates this finding.

In light of the responsibilities for maintaining employees well-being (HSE, 2004), and the benefits to organisations in cost savings, decreased absence, greater productivity and decreased turnover, organisations need to consider these issues carefully, including at times of development of services.

4.3 Limitations of Research Design and Methodology.

4.3.1 Cross-sectional design

Most research in this area and that of PTSD has been of a cross-sectional design as with the current study. This poses difficulties in establishing cause and effect of the relationships found. It has been suggested in previous research that some factors may be a consequence as opposed to a predictor of outcomes, and this limitation applies here. Longitudinal research designs are needed to overcome this difficulty, but are much more difficult to organise and more time consuming. Professionals would have to be investigated from before qualification and outcomes followed over a period of years, with a baseline set of measures taken to begin with, and then at regular intervals. This would be complicated to organise and represent a lengthy piece of research requiring a dedicated commitment.

4.3.2 Clarity of Instructions/Questions for Respondents

There were some issues of confusion and/or lack of clarity noted within the survey pack. These could have been highlighted earlier with a more extensive pilot study, enabling amendments to be made prior to the research study itself.

4.3.2.1 Definition of Terms

Some Participants commented within the returned packs that it would have been helpful for 'trauma' to be defined, in terms of questions relating to their exposure to clients who have experienced trauma, for example, did the client have to have a trauma diagnosis or not to be classified in this way. Others stated the same regarding 'recent personal stress', both in terms of what was to be defined as 'recent', and what extent of stress. These are valid issues which could have been made clearer.

4.3.2.2 Directions for completion of measures

It was noted during the scoring and collation process that some participants misunderstood the directions regarding the Survey of Perceived Organisational Support measure. A few noted that they were uncertain whether this was relating to team or organisational support, and so gave scores for each separately. This happened on enough occasions (>10) to give the author concern that other participants may too have responded based on team as opposed to organisational support, but not commented about it.

Two Participants also questioned the direction of growth in terms of the PTGI, and stated that this affected how they responded how. However, this seemed less significant as most Participants appeared happy with the completion of this measure. Nevertheless, it demonstrates that the instructions overall in the survey pack could have been clearer, and the author would wish to rectify this in any further research.

4.3.2 Self-selection bias

With any research where participants volunteer to take part, there is the risk of self-selection bias. In terms of this study, this may have resulted in CP's who are more able to cope volunteering to answer questions about their work (known as the healthy worker effect) or conversely, those struggling with adverse effects of the work volunteering due to a raised interest in the area. This would be somewhat difficult to overcome, but still needs to be considered in generalizing the results.

4.4.3 Limitations of selected measures

Following further consideration throughout the process, it was felt that the Supervisory Working Alliance Inventory, may not be measuring the elements of supervision most likely to influence outcomes, in light of previous research described above (Kadushin, 1992). The SWAI items are rather task and client focused, and there is no item questioning support available to cope with/discuss difficult feelings regarding clinical work, or emotional support available following reactions to the work. In light of these deficits, it is realised that the exploration of this factor in the current study may have missed measuring the aspects of the supervisory relationship that were likely to be predictive of outcomes.

4.4 Future Research

As stated, longitudinal research would be most useful for clarifying the direction of relationships between factors and secondary trauma or growth. This would also be useful for the areas of direct trauma, growth, resilience and coping research to explore the interactions between these different areas and bring them together.

It is felt it would be relevant to explore the relationship/interaction between adversarial growth, resilience and coping further. Resilience and coping research has generated interesting debates, which relate to the areas of STS and adversarial growth. Little research on trauma has looked at resilience factors, instead focusing on pathology, whilst it has been demonstrated that many people who experience

trauma do not become distressed to the extent of requiring help for their well-being (Bonanno, 2008).

It has been found that an increase in difficult life events increases hardiness (resilience) in terms of coping with health difficulties (Cassidy, 2000). The central role of cognitive appraisal has been acknowledged in terms of stress and physical health, and there is no reason to believe that this would not apply similarly to stress and psychological well-being. Evidence from all areas is pointing to a multidimensional nature to vulnerability, resilience, coping and PTSD (Cassidy, 2000; Brewin et al., 2000), and it would be useful for future research across all of these inter-related areas to try and address exploration of this.

A further area, which the current research did not cover, is the influence of spirituality, both on personal growth and protection from adverse effects. Research on coping has found relationships between religious and spiritual beliefs and active forms of coping, which have found to be the most successful (Baider et al., 1999). There is evidence that religion and spirituality have an important role in the whole stress process, including an influence on how individuals appraise events and how they respond to them psychologically and physically in the longer term (Park & Cohen, 1993; Seybold & Hill, 2001). Spiritual or religious beliefs link with meaning-making processes which could explain their strong influence on outcomes (Folkman & Moskowitz, 2004).

In light of the minimal reporting of spiritual growth on the PTGI from this sample (See Table 4), it would be interesting to explore this area in terms of CP's

and other professionals. Does the scientific nature of the training and work minimise the likelihood of CP's having spiritual beliefs, and does this limit the capacity for growth through meaning-making? Or do those with more secular beliefs enter the profession- again; longitudinal research designs are necessary to address these questions.

The quantitative method chosen in the current study, whilst having strengths, also has its limitations. A qualitative piece of work, interviewing clinicians, would enable deeper exploration of how CP's felt they were affected by the work, what they felt helped them with limiting these effects, how they make meaning of it, what they do to protect themselves, how aware or open they feel the profession is to these issues. A mixed method design would be useful in future research to enable exploration of these issues that could also indicate the most appropriate measures to use in the quantitative part of the research, given the concerns discussed earlier.

References

Adams, S. A., & Riggs, S. A. (2008). An exploratory study of vicarious trauma
   among therapist trainees. *Training & Education in Professional Psychology,
   2*(1), 26-34.

American Psychiatric Association. (1994). *Diagnostic and statistical manual of
   mental disorders* (4th ed.). Washington, DC: Author.

Arnold, D., Calhoun, L. G., Tedeschi, R., & Cann, A. (2005). Vicarious posttraumatic growth in psychotherapy. *Journal of Humanistic Psychology, 45*(2), 239-263.

Baider, L., Russak, S. M., Perry, S., Kash, K., Gronert, M. (1999). The role of religious and spiritual beliefs in coping with malignant melanoma: an Israeli sample. *Psychooncology*, 8, 27-35.

Baird, S., & Jenkins, S. R. (2003). Vicarious traumatization, secondary traumatic stress, and burnout in sexual assault and domestic violence agency staff. *Violence and Victims, 18*(1), 71-86.

Brady, J. L., Guy, J. D., Poelstra, P. L., & Brokaw, B. F. (1999). Vicarious traumatization, spirituality, and the treatment of sexual abuse survivors: A national survey of women psychotherapists. *Professional Psychology: Research and Practice, 30*(4), 386-393.

Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology,* 68 (5), 748-766.

Brewin, C. R., Dalgleish, T., & Joseph, S. (1996). A dual representation theory of

    posttraumatic stress disorder. *Psychological Review, 103*(4), 670-686.

Bride, B. E., Radey, M., & Figley, C. R. (2007). Measuring compassion fatigue.

    Clinical Social Work Journal, 35(3), 155-163.

Bride, B. E. (2004). The impact of providing psychosocial services to traumatized

    populations. *Stress, Trauma and Crisis: An International Journal, 7*(1), 29-46.

Bride, B. E., Robinson, M. M., Yegidis, B., & Figley, C. R. (2004). Development

    and validation of the secondary traumatic stress scale. *Research on Social Work*

    Practice, 14(1), 27-35.

Bonnano, G. A., (2008). Loss, trauma, and human resilience: have we

    underestimated the human capacity to thrive after extremely aversive events?

    Psychological Trauma: Theory, Research, Practice, and Policy, S(1), 101-113.

Bonanno, G. A., Moskowitz, J. T., Papa, A., & Folkman, S. (2005). Resilience to loss in bereaved spouses, bereaved parents, and bereaved gay men. *Journal of Personality and Social Psychology*, 88, 827-843.

Cadell, S., Regehr, C., & Hemsworth, D. (2003). Factors contributing to posttraumatic growth: A proposed structural equation model. *American Journal of Orthopsychiatry, 73*(3), 279-287.

Calhoun, L. G., & Tedeschi, R. G. (2006). The foundations of posttraumatic growth: An expanded framework. In L. G. Calhoun, R. G. Tedeschi, L. G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research & practice*. (pp. 3-23). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.

Cassidy, T. (2000). Stress, healthiness and health behaviours: An exploration of the role of life events, daily hassles, cognitive appraisal and the coping process. *Counselling Psychology Quarterly, 13*(3), 293-311.

Chartered Institute of Personnel and Development (2007). *New directions in managing employee absence*. [Electronic Version]. London:CIPD.

Chartered Institute of Personnel and Development, Health and Safety Executive, Investors in People (2009). *Line management behaviour and stress at work.* [Electronic Version] London:CIPD.

Clohessy, S., & Ehlers, A. (1999). PTSD symptoms, response to intrusive memories and coping in ambulance service workers. *British Journal of Clinical Psychology*, 38, 251-265.

Cohen, J. (1988). *Statistical power analysis for the behavioural sciences (2nd ed.).* Hillsdale, NJ: Erlbaum.

Collins, R. L., Taylor, S. E., & Skokan, L. A. (1990). A better world or a shattered vision? Changes in life perspectives following victimization. *Social Cognition*, 8, 263-285

Deighton, R. M., Gurris, N., & Traue, H. (2007). Factors affecting burnout and compassion fatigue in psychotherapists treating torture survivors: Is the therapist's attitude to working through trauma relevant? *Journal of Traumatic Stress, 20*(1), 63-75.

Deshields, T., Tibbs, T., Fan, M., & Taylor, M. (2006). Differences in patterns of depression after treatment for breast cancer. *Psychooncology*, 15, 398-406.

Devilly, G. J., Wright, R., & Varker, T. (2009). Vicarious trauma, secondary traumatic stress or simply burnout? effect of trauma therapy on mental health professionals. *Australian and New Zealand Journal of Psychiatry, 43*(4), 373-385.

Dunkley, J., & Whelan, T. A. (2006). Vicarious traumatisation: Current status and future directions. *British Journal of Guidance and Counselling, 34*(1), 107-116.

Efstation, J. E., Patton, M. J., & Kardash, C. M. (1990). Measuring the working alliance in counselor supervision. *Journal of Counseling Psychology*, 37(3), 322-329.

Eisenberger, R., Hungtington, R., Hutchison, S., & Sowa, D. (1986). Perceived Organizational Support. *Journal of Applied Psychology, 71*, 500-507.

Elklit, A., Schmidt Pederson, S., & Jind, L. (2001). The crisis support scale: psychometric properties and further validation. *Personality and Individual Differences*, 31, 1291-1302.

Fairbank, J. A., Keane, T.M. & Malloy, P. F. (1983). Some preliminary data on the psychological characteristics of Vietnam veterans with posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 51, 912-919.

Figley, C. R. (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. New York: Brunner/Mazel.

Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C. R. Figley, & C. R. Figley (Eds.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. (pp. 1-20). Philadelphia, PA US: Brunner/Mazel.

Figley, C. R. (1995). Compassion fatigue: Toward a new understanding of the costs of caring. In B. H. Stamm, & B. H. Stamm (Eds.), *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators*. (pp. 3-28). Baltimore, MD US: The Sidran Press.

Figley, C. R., (2002). Compassion fatigue: Psychotherapists' chronic lack of self care. *Journal of Clinical Psychology*, 58(11), 1433-1441.

Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology, 55*, 745-774.

Frazier, P. A., & Kaler, M. E. (2006). Assessing the validity of self-reported stress-related growth. *Journal of Consulting and Clinical Psychology*, 74, 859-869.

Health & Safety Executive (2004). *Management standards for work-related stress*. [Electronic Version]. Norwich:Office of Public Sector Information.

Health & Safety Executive (2009). *Health, work and well-being*. [Electronic Version]. Norwich:Office of Public Sector Information.

Hummell, J., & Koelmeyer, L. (1999). New graduates: Perceptions of their first occupational therapy position. *British Journal of Occupational Therapy, 62,* 351–358

Jenkins, S. R., & Baird, S. (2002). Secondary traumatic stress and vicarious trauma: A validational study. *Journal of Traumatic Stress, 15*(5), 423-432.

Joinson, C. (1992). Coping with compassion fatigue. *Nursing*, 22(4), 116-122.

Joseph, S., Andrews, B., Williams, R., & Yule, W. (1992). Crisis support and psychiatric symptomatology in adult survivors of the Jupiter cruise ship disaster. *British Journal of Clinical Psychology*, 31, 63-73.

Joseph, S., & Linley, P. A. (2008). In Joseph S., Linley P. A. (Eds.), *Trauma, recovery, and growth: Positive psychological perspectives on posttraumatic stress*. Hoboken, NJ US: John Wiley & Sons Inc.

Joseph, S., & Linley, P. A. (2004). Adversarial growth and positive change following trauma: Theory, research, and practice. *Ricerche Di Psicologia, 27*(1), 177-190.

Joseph, S., & Linley, P. A. (2006). Growth following adversity: Theoretical perspectives and implications for clinical practice. *Clinical Psychology Review, 26*(8), 1041-1053.

Joseph, S., & Linley, P. A. (2005). Positive adjustment to threatening events: An

organismic valuing theory of growth through adversity. *Review of General*

Psychology, 9(3), 262-280.

Kadushin, A. (1992). *Supervision in social work*. New York: Columbia University
Press.

King, D. W., Vogt, D. S., & King, L. A. (2004). Risk and resilience factors in the

etiology of chronic posttraumatic stress disorder. *Journal of Applied Social*

Psychology, 36, 2980-2992.

Kraemer, H. C., Kazdin, A. E., Offord, D. R., Kessler, R. C., Jensen, P. S., &

Kupfer, D. J. (1997). Coming to terms with the terms of risk. *Archives of*

General Psychiatry, 54, 337-343.

Linley, P. A., Andrews, L., & Joseph, S. (2007). Confirmatory factor analysis of the

posttraumatic growth inventory. *Journal of Loss & Trauma, 12*(4), 321-332.

Linley, P. A., & Joseph, S. (2007). Therapy work and therapists' positive and

negative well-being. *Journal of Social and Clinical Psychology, 26*(3), 385-

403.

Linley, P. A., & Joseph, S. (2004). Positive change following trauma and adversity:

    A review. *Journal of Traumatic Stress, 17*(1), 11-21.

Linley, P. A., & Joseph, S. (2005). The human capacity for growth through

    adversity. *American Psychologist, 60*(3), 262-264.

Linley, P. A., Joseph, S., & Loumidis, K. (2005). Trauma work, sense of coherence,

    and positive and negative changes in therapists. *Psychotherapy and*

    *Psychosomatic*s, 74, 185-188.

Marmaras, E., Lee, S. S., Siegel, H., & Reich, W. (2003). The relationship between

    attachment styles and vicarious traumatization in female trauma therapists.

    Journal of Prevention and Intervention in the Community, 26(1), 81-92.

McCann, L. & Pearlman, L. A. (1990). Vicarious traumatization: a framework for

    understanding the psychological effects of working with victims. *Journal of*

    Traumatic Stress, 3, 131-149.

McFarland, C., & Alvaro, C. (200). The impact of motivation on temporal

comparisons: coping with traumatic events by perceiving personal growth.

Journal of Personality and Social Psychology, 79, 327-343.

McLean, S., Wade, T. D., & Encel, J. S. (2003). The contribution of therapist

beliefs to psychological distress in therapists: An investigation of vicarious

traumatization,

burnout and symptoms of avoidance and intrusion. *Behavioural and Cognitive*

Psychotherapy, 31(4), 417-428.

National Health Service (2009). *Health & Wellbeing Final Report*. [Electronic

Version]. Leeds:DoH.

National Institute for Health and Clinical Excellence (2009). *Promoting mental*

wellbeing at work. London:NICE Public Health Guidance.

Nelson-Gardell, D., & Harris, D. (2003). Childhood abuse history, secondary

traumatic stress, and child welfare workers. *Child Welfare, 82*(1), 5-26.

New Ways of Working for Applied Psychologists in Health and Social Care (2007). *Organising, managing and leading psychological services*. British Psychological Society

Park, C. L., & Cohen, L. H. (1993). Religious and non-religious coping with the death of a friend. *Cognitive Therapy Research*, 17(6), 561-77

Pearlman, L. A., & Saakvitne, K. W. (1995). *Constructivist self-development theory approach to treating therapists with vicarious traumatization and secondary traumatic stress disorder*

Reid, Y., Johnson, S., Morant, N., Kuipers, E, Szmukler, G., Bebbington, P., Thornicroft, G., & Prosser, D. (1999). Improving support for mental health staff: a qualitative study. *Social Psychiatry and Psychiatric Epidemiology, 34,* 309–15.

Robertson, N. & Perry, A. (2010) In press.

Rodriguez, N., van de Kamp, H., Foy, D. W. (1998). Posttraumatic stress disorder in survivors of childhood sexual and physical abuse: A critical review of the empirical research. *Journal of Child Sexual Abuse*, 7(2), 17-45.

Rothschild, B. (2006). *Help for the helper: The psychophysiology of compassion fatigue and vicarious trauma*. New York, NY US: W. W. Norton & Co.

Sabin-Farrell, R., & Turpin, G. (2003). Vicarious traumatization: Implications for the mental health of health workers? *Clinical Psychology Review, 23*(3), 449-480.

Salston, M., & Figley, C. R. (2003). Secondary traumatic stress effects of working with survivors of criminal victimization. *Journal of Traumatic Stress*, 16(2), 167-174.

Seybold, K. S., & Hill, P. C. (2001). The role of religion and spirituality in mental and physical health. *Current Directions in Psychological Sciences,* 10(1), 21-24.

Shore, L. M., & Tetrick, L. E. (1991). A construct validity study of the survey of perceived organizational support. *Journal of Applied Psychology*, 76(5), 637-643)

Simon, C. E., Pryce, J. G., Roff, L. L., & Klemmack, D. (2005). Secondary traumatic stress and oncology social work: Protecting compassion from fatigue and compromising the worker's worldview. *Journal of Psychosocial Oncology, 23*(4), 1-14.

Spence, S. H., Wilson, J., Kavanagh, G., Strong, J., & Worral, L. (2001). Clinical

    Supervision in four mental health professions: a review of the evidence.

    Behaviour Change, 18(3), 135-155.

Sprang, G., Clark, J. J., & Whitt-Woosley, A. (2007). Compassion fatigue,

    compassion satisfaction, and burnout: Factors impacting a professional's

    quality of life. *Journal of Loss & Trauma, 12*(3), 259-280.

Stamm, B. H. (1997). Work-related secondary traumatic stress. *PTSD Research*

    Quarterly, 8

Stamm, B. H. (1999). *Secondary traumatic stress: Self-care issues for clinicians,*

    researchers, and educators

Stutts, W., Calhoun, L. G., Tedeschi, R. G., & Cann, A. (1994). Religion,

    assumptive worlds, and the aftermath of trauma: What changes? *Annual*

    convention of the American Psychiatric Association. Los Angeles: APA.

Tedeschi, R. G. & Calhoun, L. G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. Journal of Traumatic Stress, 9(3), 455-471.

Tedeschi, R. G., & Calhoun, L. G. (2004). A clinical approach to posttraumatic growth. In P. A. Linley, S. Joseph, P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice*. (pp. 405-419). Hoboken, NJ US: John Wiley & Sons Inc.

Warren, T., Lee, S., & Saunders, S. (2003). Factors influencing experienced distress and attitude toward trauma by emergency medicine practitioners. *Journal of Clinical Psychology in Medical Settings, 10*(4), 293-296.

Westphal, M., & Bonanno, G. A. (2007). Posttraumatic growth and resilience to trauma: different sides of the same coin of different coins? *Applied Psychology: An International Review,* 56(3), 417-427.

Yassen, J. (1995). *Preventing Secondary Traumatic Stress Disorder*. In C. R. Figley (Eds.) Compassion fatigue: coping with secondary traumatic stress disorder in those who treat the traumatized (pp.178-208). New York: Brunner/Mazel.

Section 3- Critique

Critique

1.0 Origins of the Literature review and Research Questions

I commenced the doctoral course in 2007 with an interest in trauma experiences, though not a vast amount of clinical experience working with individuals who had experienced trauma. However, I was interested in PTSD reactions and individual differences in response to traumatic experiences.

Through 'research fairs' including information on areas of interest given by who was later to become my research supervisor, I became aware and interested in the idea of secondary traumatisation in health professionals. I began to read about the concepts of VT, STS and CF, finding it an area which held my interest and which I wished to explore further.

Alongside these initial explorations, I was undertaking a placement in adult mental health, working within a psychodynamic model. During this, I had an experience personally, which further concreted my interest and enthusiasm for this area of research. I experienced a strong reaction in response to a session with a particularly complex client who had suffered much trauma throughout their life. Whereas I had felt sadness and frustration for clients I had worked with previously, this was a much stronger reaction, with many intrusion and arousal symptoms, having a more adverse and lasting impact on me. Gaining an understanding of this experience through support by my placement supervisor at the time, increased my

ability to deal with it effectively and use it therapeutically with the client, but it struck me that without this support, understanding and normalising, a clinician may have a very different outcome. This made me consider my own and other clinicians well-being, and the effects that the work can have upon this.

As I read further around the topic, I became interested in personal growth following adversity, and the ideas around this. Again, this struck a chord personally with me related to life experiences before commencing training. I did not want to solely focus on the negative effects of the work as am very passionate about the career and know that there are many benefits to be gained from helping others to work through difficult and traumatic experiences. I did not want this element of the work to be lost in the pathologising of adverse effects, but rather wanted to increase awareness of both.

Gradually, these initial areas of interests developed into a wish to explore the different influences on outcomes in the work in some way, and this became the focus for the Literature Review.

2.0 Literature Review

Through the process of reviewing the literature, I found that the area, though a promising one, was plagued with methodological difficulties and equivocal findings. This created some difficulty in deciding where to focus further research.

Quantitative studies were sought and reviewed to address the question of what factors may influence the effects of the work on adverse outcomes in the form of STS. The decision to solely include quantitative work was informed partly by the reality of research in the area already having extensive conceptual and methodological differences, which would have been increased if qualitative material had been included. Synthesis of material was complicated by the use of different concepts, theoretical underpinnings and measures of different varieties, to add qualitative literature to this already complex mix would have made any conclusions even more difficult to make.

However, I found through the writing process that it would have been interesting to explore personal accounts of these experiences and what professionals felt influenced their own outcomes, investigating their coping strategies, meaning making around the processes and the kinds of support they found useful.

3.0 Study Development

In examining the literature on PTSD, secondary traumatisation in health professionals, and adversarial growth, I found many possible factors that were thought to influence these outcomes, with varying amounts and quality of supporting evidence.

It took time to develop a clear focus due to the wealth of factors which could be further explored, and I got a little lost in all of these until my supervisor emphasized that a more specific focus was required. In the first instance, I definitely wanted to investigate whether CP's were experiencing STS and adversarial growth, but I also wished to look at particular factors of influence. There was a particular study with less methodological difficulties than some and a focus on therapists that had aspects I wished to explore further (Linley & Joseph, 2007). Some of the findings from this suggested that certain therapeutic models used by therapists may influence the outcomes, and I found this of particular interest in the current professional climate where CBT is being recommended as the treatment of choice in most cases. Exploration of this became one of my secondary research questions.

Additionally, social support had been acknowledged as key in general trauma research, as well as in the areas of coping, resilience and growth, and I wished to investigate this in relation to professionals. This led to me identifying four different elements of support for a CP which may influence their ability to manage the effects of the work. These were, social support, organisational support, team support and supervisory support, and formed the basis of the rest of my study.

4.0 Evolving Research Questions and Measurement Considerations

There are a vast array of measures designed and used to measure the positive and negative outcomes from work as a health professional, making the decisions around these complicated. This was one of the most changeable aspects of the study

design, as I grappled with which measures were going to complement my research questions in the best way, whilst at the same time proving statistically robust, reliable and valid.

Initially, I had chosen to use 'The Changes in Outlook Questionnaire' (Joseph & Linley, 2004), which looks at positive and negative changes in an individual's view of the world following adversity. However, as my research questions developed, becoming more focused, and following the peer review process, I realised that this measure would not meet the needs of the project in terms of exploring STS symptomatology. Changes in outlook are more conceptually focused within VT, and I wished to focus on STS. Similarly, 'The Professionals Quality of Life Scale' (Pearlman 1998) was considered in earlier stages, but excluded for the same reason.

My research questions evolved to be more concerned with both growth and adverse effects, through further reading and reflection, and this naturally caused for adjustments to design as these questions were finalised.

5.0 Research Project

The process with regards to gaining ethical approval was found to be rather challenging and extremely time-consuming. This was a useful experience for me on training, but I felt that the time consuming and repetitive nature of the process was likely to prevent professionals from undertaking research regularly post-qualifying.

This is a shame, and perhaps could be addressed somewhat, whilst still ensuring the maintenance of ethical standards.

Overall, I found the undertaking of the project challenged my self-confidence immensely, mainly in relation to confidence in my own academic abilities. It was overwhelming at times, with much anxiety experienced at various stages of the process. I also found that it challenged my identity as a clinician at times, as I have always aligned myself more with the practitioner rather than the scientist part of the role of CP. I grappled with the balance between the two elements throughout, but am now proud that I have managed both, and feel that I have grown and been shaped as a CP more throughout.

Having said what a challenge the process was, there were times that I really enjoyed it, and I feel I have grown in many ways through completion of the project. I enjoyed the more active and practical parts of the process, partly because these were more defined with beginnings and endings that could be 'ticked off' so to speak when complete. Recruitment and interaction with CP's through this was my favourite part of the process, and I felt rather energized at this stage. The topic area proved of interest to the profession, and I found feedback from clinicians very encouraging. There was a high response rate and much interest from Clinical Psychologists all over the UK, and across various service types. This was encouraging and many chose to feed back regarding the process by email to the author after completion. The support in the profession generally was over and above what I would have expected, for example, clinicians from other geographical areas who did not know me offering to help by spreading awareness of my research,

passing on the information to other colleagues etc. There was a feeling of the CP community pulling together to enhance the scientific process, and I think a memory and mutual understanding of how challenging the process can be. I found this very uplifting and it increased my pride to be part of the profession. It also had the effect of motivating me hugely.

The positive response suggests that clinicians themselves are aware that the work can have an effect on their well-being, and perhaps welcome more information about outcomes, how to minimise adverse effects and celebrate positive effects of their work. Due to their roles, most CP's will spend the majority of their working time, energy and resources thinking about others, and perhaps it was refreshing for some focus to be placed on their own well-being through taking part in this research.

6.0 Writing of the Thesis

Initially I found the writing of the thesis extremely difficult. I had a 'crisis of confidence' in terms of my ability to make it to the required standard. However, towards the end of the process I reminded myself that it was my piece of work and it was the product of a long journey into the career of Clinical Psychologist, so I should make it count. This shifting of feelings of responsibility and control really motivated me and enabled me to find some enjoyment in the process. The support amongst the cohort was amazing, and we tried to spur each other on, sharing highs and lows and finding the strength together to carry on. I found my research

supervision challenged me significantly at times, but now looking at the final product; I am grateful for this and can understand why the process had to be so difficult.

As with the rest of my experiences on CP Training, I am sure that this struggle has shaped and prepared me further for my future in the profession, and in wider aspects of life.

7.0 Limitations

In exploring the literature, it was clear that there was a lot of consideration of the effects that a personal trauma history, especially childhood trauma experiences may have on the effects of the work on health professionals. This is an area that I would have liked to include in my research, including the Child Trauma Questionnaire measure, but ultimately avoided this due to ethical implications. As described earlier, the ethical process was lengthy and I felt that with the limited resources available and my status as a Trainee, that there would be significant difficulty attaining ethical approval for exploring such a sensitive issue.

As discussed previously, there are limitations with cross-sectional designs in this area, with a need for more longitudinal studies to investigate the direction of causality. Again, limited resources did not allow for me to consider this option at this time.

8.0 Further Interests Developed Throughout Process Leading to Ideas for Future Enquiry

Many changes take place during the three years on doctoral training, and of course further interests and ideas have developed throughout this process, from additional clinical experience, personal experiences and the undertaking of the research itself.

I have had the experience of working with many individuals who have experienced traumatic experiences since commencing this project, and been fascinated by the vast individual differences in the development, presentation, and responses to these difficulties. This has resulted in interest growing in exploring these personal experiences more, and the meaning attached to them, which would lend itself to a qualitative research method.

In addition, through further reading around the area, my knowledge and interest has grown around coping, resilience and growth; both these as different areas of interest but also the relationships between them, and the possibility of bringing these different areas together to explain and understand individual's experience and outcomes following trauma.

An area which has particularly interested me, more towards the end of this process, is that of the influence of spirituality on individual's experiences of trauma, and whether certain spiritual beliefs or practices has an effect on individual's resilience and encourage personal growth through adversity. This interest has been

influenced by personal experience of practicing Buddhism, which has developed during the course of training, and I feel helps my coping abilities immensely. The values of this links directly with cognitive appraisal of events which has been raised as a key predictor of resilience.

I would also be interested in investigating the concept of transference further, which I feel does relate to this area, but is aligned rather differently theoretically. I feel this would bring together clinical work and research for me personally, and evidence around psychodynamic therapy is less well represented in the research base currently due to the process not lending itself well to research designs and limitations.

9.0 Summary

In summary, it has been a challenging but enjoyable process through which I have grown as a clinician. I have found the area of research stimulating and have been inspired by the responses from members of the profession. I have learnt to be more focused and specific, a skill which I have struggled to attain, but which is necessary for the research process and indeed other elements of the work. The results of my project have increased my determination to remain aware of the importance of self-care throughout my future career, and to consider risks and benefits, not only for myself, but also for colleagues, and in the future, supervisees. My interest in trauma has grown throughout the process and I am sure will continue to form an important element of my future career.

Appendices

Statement of Epistemological Position

This research opted for quantitative exploration, following a relativist position, given the evidence of the phenomenon, and its establishment in other professions. It aimed to assess what might be normative for CP's and was not interested particularly in either theory building (Grounded Theory approach) or lived experiences (Interpretive Phenomenological Approach) since the phenomena under investigation were increasingly well defined in the literature.

First Author/ yr	Profession/ Context/Location	No. of Participants/ Response Rate	Focus/ Conceptualisation	Primary Measures	
Adams 2008	Therapist trainees US Clinical & Counselling Programs	129 (36%)	VT mainly Influence of defence style, history of trauma, experience, trauma specific training	TSI Defence Style Q Experience Q *	Sig bet def
Baird 2003	Trauma counsellors working in sexual assault and domestic violence Volunteer and paid staff US	101 (not specified)	VT STS (CF) Burnout	Work History and Activities Measure * CFST TSI MBI SCL-90R	Hig cou exp VT Yo and cou rep em
Brady 1999	Female Psychotherapists treating survivors of sexual abuse US National Survey	446 (47%)	VT STS Spirituality Personal history of therapy and sexual trauma, exposure as risk factors.	IES TSI Spiritual Well-being Scale	Gr cur sig lev syi not Gr tra lin spi No dif tho

First Author	Risk Factors	Preventative Factors	Enhanced Experience	No Relations Found
Adams 2008	Self-sacrificing defense style* associated with high negative symptoms Interactional relationship between certain defense styles, mainly self-sacrificing, and personal trauma history linked to increased effects Limited experience (based on Trainees after 2 semesters training only) linked with increased negative symptoms Limited/no trauma specific training	Adaptive defense style/coping mechanisms linked with lower symptoms	Not investigated	Demographic any variables
Baird 2003	Lower exposure/number of clients (authors link to lower sense of personal accomplishment?). More of a risk evidenced for volunteer workers than paid in relation to this.	Exposure; higher caseload/clinical work time Higher levels of education linked with lower negative symptoms	More experienced trauma workers reported greater personal accomplishment	Exposure; le experience Age
Brady 1999	Exposure; increased linked with increased risk	Lower exposure; caseload, hours with trauma, client mix	Increased exposure linked with spiritual well-being	Client group adult/children
Deighton 2007	High advocacy of working through coupled with low degree of working through found	Practice matched beliefs in terms of	Not investigated	Years of exp with any vari

143

Copy of Email circulated for Recruitment Purposes

Hello,

    I am wishing to recruit Clinical Psychologists for my doctoral research entitled, "Secondary Traumatisation or Adversarial Growth: the Effects of Clinical Psychologist's Work on their Well-being". This is a quantitative piece of work using measures looking at secondary traumatisation, adversarial growth, compassion fatigue and social support. I am looking for what changes people experience from the work, and also factors which may influence these.

    I would be very grateful for any help in terms of recruiting, in order to achieve a reasonable response rate when packs are sent out.

    If you would like further information, please do not hesitate to contact me on jca15@le.ac.uk

    Thank you,

    Jo Ablett
    Trainee Clinical Psychologist
    University of Leicester

PTSD Diagnostic Criteria (DSM IV)

A.   The person has experienced an event that is outside of usual human experience and that would be markedly distressing to almost anyone, e.g., serious threat to one's life or physical integrity; serious threat or harm to one's children, spouse, or other close relatives and friends; sudden destruction of one's home or community; or seeing another person who has recently been, or is being, seriously injured or killed as the result of an accident or physical violence.

B.   The traumatic event is persistently reexperienced in at least one of the following ways:

         (1) recurrent and intrusive distressing recollections of the event
         (2) recurrent distressing dreams of the event
         (3) sudden acting or feeling as if the traumatic event were recurring
         (4) intense psychological distress at exposure to events that symbolize or resemble an aspect of the traumatic event, including anniversaries of the trauma

C.   Persistent avoidance of stimuli associated with the trauma, or numbing of general responsiveness, as indicated by at least three of the following:

         (1) efforts to avoid thoughts or feelings associated with the trauma
         (2) efforts to avoid activities or situations that arouse recollections of the trauma
         (3) inability to recall an important aspect of the trauma
         (4) markedly diminished interest in significant activities
         (5) feeling of detachment or estrangement from others
         (6) restricted range of effect
         (7) sense of a foreshortened future

D.   Persistent symptoms of increased arousal, as indicated by at least two of the following:

         (1) difficulty falling or staying asleep
         (2) irritability or outbursts of anger
         (3) difficulty concentrating
         (4) hypervigilance
         (5) exaggerated startle response
         (6) physiological reactivity upon exposure to events that symbolise or resemble any aspect of the traumatic event.

E.   Duration of the disturbance (symptoms B, C, and D) of at least a month.

PTGI Factor Scoring Instructions

Factor 1-Relating to others

Add scores from question numbers, 6, 8, 9, 15, 16, 20 and 21

Factor 2-New possibilities

Add scores from question numbers, 3, 7, 11, 14 and 17

Factor 3-Personal strength

Add scores from question numbers, 4, 10, 12 and 19

Factor 4-Spiritual change

Add scores from question numbers, 5 and 18

Factor 5-Appreciation of life

Add scores from question numbers, 1, 2 and 13

(Tedeschi & Calhoun, 1996)

Chronology of Research Process

Research Proposal Submitted and panel attended	**June 2008**
Peer Review Process	**Dec 2008**
Ethical Submission and Panel	**April 2009**
Data Collection	**May 2009-Sept 2009**
Data Analysis	**Oct 2009-Jan 2009**
Literature Review	**Jan 2009**
Writing of Thesis	**Feb 2009-April 2009**

Declaration

I confirm that the literature review and research report contained within this

thesis have not been submitted for any other degree, or to any other

insitution.

There is darkness and there is light. Remember, living is an art.

Henrik Ibsen

Thank you to all my wonderful friends and family

who have supported me throughout this journey.

I am not sure I would have made it without you all.

Summary

It has been increasingly recognised that there are costs to caring for health professionals who help individuals who have experienced trauma within their work. There has also been recognition, in recent years, that there are factors that may have an influence on positive or negative effects of the work for these professionals. A review of relevant literature found that whilst there are interesting developments in the area, methodologies have had several limitations and results have been equivocal in terms of identifying factors of influence. There is a lack of UK-based studies, and none which focus exclusively on Clinical Psychologists as a professional group.

The thesis attempts to build on the previous evidence base, with an exclusive focus on the positive and negative effects of a Clinical Psychologists work on their well-being. These are conceptualised as Secondary Traumatisation and Adversarial Growth, and measures chosen accordingly. A National Survey design is used targeting Clinical Psychologists throughout the UK, recruited through BPS DCP email lists. Particular factors of social support, organisational support, team support and the supervisory alliance are focused on and their relation to outcomes. In addition, use of primary therapeutic model is assessed against outcomes, using hierarchical multiple regression analyses. Findings suggest that Clinical Psychologists are experiencing Secondary Traumatisation and Adversarial Growth, though the latter perhaps at lower levels than may be expected. There were not significant findings in relation to the specific factors explored, but trends are discussed, overall implications from the findings, and reflection on the research process.