THE RISK AND PROTECTIVE FACTORS FOR THE DEVELOPMENT OF COMPASSION FATIGUE AND BURNOUT IN PSYCHOLOGISTS

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A thesis submitted in partial fulfilment of the requirements for the degree of Master of Arts in Psychology at Massey University, 1999.

ABSTRACT

The present study examined how both individual and organisational factors combine in different ways to produce risk and protective factors for the development of compassion fatigue and burnout. The reason for undertaking research into secondary traumatic stress disorder in psychologists is because there seems to be an increase in psychologists leaving the field of psychology due to increased stress and burnout.

Several variables were examined, including an investigation between risk and protective factors for the development of compassion fatigue and burnout. These included work settings i.e., public institutions and private practices, full time and part time work, life satisfaction, work locus of control, and intention to quit the field, along with several demographic variables, such as gender.

The compassion fatigue and burnout variables correlated with many of the protective and risk factors. Public institutions, external work locus of control, poor life satisfaction, and full time work, all predicted a higher risk of developing either compassion fatigue/burnout or both. The results indicated that compassion fatigue and burnout should be considered as a concern for practitioners, mental health organisations and trainers of future psychologists.

ACKNOWLEDGEMENTS

I would like to thank my supervisors Cheryl Woolley and Douglas Paton for their guidance and encouragement. Through their outstanding advice and positive approach they inspired my confidence in my ability to successfully complete this project.

I would like to thank the psychologists and mental health workers who participated, for giving their time and thoughts and making this research possible.

My Parents Owen and Lyn Tomkins, who I would like to dedicate this work to. Their encouragement to persevere and their belief in my ability over the years has been to my advantage. For their unlimited love and support throughout my studies, I am forever grateful.

Lloyd and Denise Reeve for their support and kindness, for which I am indebted.

Special thanks to David for his love and support and for always believing in me.

Finally, I would like to thank all of my friends, especially Amanda Smith, Lisa Balemi, and Andi Nicholson, for their support and much appreciated distraction.

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INTRODUCTION

AND OVERVIEW OF LITERATURE

Secondary traumatic stress disorder (STSD) is the presence of Post traumatic stress disorder (PTSD) symptoms in a caregiver. A 'caregiver' can include emergency workers, nurses, doctors, and psychologists. When caregivers are exposed to their client's trauma, they themselves may display the same symptoms as their client. These symptoms may include flashbacks, nightmares, insomnia, and generalised anxiety. This can be a problem both for the agency that has employed them and the clients that they see. If the psychologist is affected by secondary traumatic stress then they may make poor professional judgements, have low job motivation, and relationships may suffer with colleagues and clients.

Secondary traumatic stress (STS) refers to naturally occurring behaviours and emotions resulting from interacting with, having exposure to, and treating a traumatising event experienced by another - the stress results from helping or wanting to help a traumatised person (Figley, 1993). Secondary traumatic stress disorder is a syndrome with symptoms that are nearly identical to Post traumatic stress disorder (APA, 1994). The exception is that exposure to knowledge about a trauma experienced by a significant other is associated with the set of STSD symptoms, whereas PTSD symptoms are directly connected to the sufferer, the person experiencing the primary traumatic stress.

Secondary traumatic stress is an important issue that has only just begun to be examined and appear in the literature recently. Secondary traumatic stress should be a concern especially for mental health organisations. In many ways, the health of an organisation depends upon the health of its staff. This is especially important for psychologists who are relied upon for accurate perceptions, sound judgement, and decision making.

These capacities are often challenged when psychologists are worn down either by their work environment (burnout) or by the content of their work (STS). An investigation of the prevalence, risk, and mediating factors of secondary traumatic stress has never been completed on a sample of New Zealand psychologists. With changes in the way that institutions are being managed and organised, it is important that secondary traumatic stress is recognised as a relevant and pertinent issue which may impact on the working lives of psychologists.

The quotation below cites DSM-IV and is a description of what constitutes a sufficiently traumatic event. The italicised section emphasises that people can be traumatised without actually being harmed or threatened in any way (i.e., secondarily).

> "The essential feature of Post Traumatic Stress Disorder is the development of characteristic symptoms following exposure to an extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threats to one's physical integrity or *witnessing an event that involves death, injury, or a threat to the physical integrity of another person or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate*". (APA, 1994, p. 424; italics added)

There is no single routinely used term to describe the result of a psychologist's exposure to traumatic material. The phenomenon of "helping induced trauma" has been examined in a few dozen publications in the general area of traumatic stress studies. The concepts that define secondary trauma vary greatly and there is no routinely used term to designate exposure to another's trauma through one's role as a helper. There are various terms commonly used. These are: "compassion fatigue"; "secondary traumatic stress"; "countertransference"; and "vicarious traumatisation". STS is the broadest term, with other terms, such as compassion fatigue and vicarious traumatisation serving as specific types of secondary traumatic stress.

McCann & Pearlman (1990) describe vicarious traumatisation in psychologists treating traumatised victims as a phenomenon that reflects their inner experience of "self" and "other" transformed in ways that parallel the experiences of the trauma survivor. These transformations include "changes in one's identity and world wide view, in self capacities, ego resources, and psychological needs and cognitive schemata" (McCann & Pearlman, 1990, p 79). Stamm (1997) describes vicarious traumatisation as the negative cognitive schema and behavioural changes in therapists which occur as a result of direct contact with traumatised clients.

Countertransference has traditionally been referred to as the activation of the therapist's unresolved or unconscious conflicts or concerns (McCann & Pearlman, 1990). More recently countertransference has incorporated the painful feelings, images and thoughts that can accompany work with trauma survivors (Stamm, 1997).

Secondary traumatic stress is described as the "disorders and symptoms displayed by supporters and helpers of those experiencing PTSD" (Stamm, 1997, p. 1). STS was operationalised as compassion fatigue by Figley (1995). CF is a natural consequence of working with people who have experienced extremely stressful events. CF develops as a result of the provider's exposure to their clients experiences combined with their empathy for their clients (Figley, 1995).

Compassion fatigue and vicarious traumatisation and even some forms of countertransference are seen as being a part of, or a specific sub-section of STS. Stamm (1997) believes that countertransference is the reaction to clients and their material. It may direct therapeutic choices and is a state tied directly to the client. By contrast CF/STS/VT, results from working with trauma victims, and induces more trait-like changes to values, beliefs, and behaviours in caregivers.

Countertransference can occur outside of the context of exposure to traumatic material. CF/STS/VT always arises from exposure to a client's traumatic material. Countertransference applies more to how clients affect therapists' work with them, and CF/STS/VT, is about how clients affect therapists lives, relationships with themselves and others, social networks and work (Stamm, 1997).

Figure 1. The differences between compassion fatigue, secondary traumatic stress, vicarious traumatisation and countertransference.

Compassion Fatigue (CF)	Natural consequence of working with traumatised clients. CF develops as a result of provider's exposure to clients experiences combined with their empathy for their clients (Figley, 1995).
Secondary Traumatic Stress (STS)	The symptoms and disorders displayed by caregivers of those experiencing post traumatic stress disorder (PTSD). Presence of PTSD symptoms in a caregiver (Figley, 1995).
Vicarious Traumatisation (VT)	Transformation of their inner experience of "self" and "other" that parallel the experience of the trauma victim (McCann & Pearlman, 1990). The negative cognitive schema and behavioural changes in psychologists that occur as a result of direct contact with traumatised clients (Stamm, 1997).
Countertransference	Activation of the therapists unresolved or unconscious conflicts or concerns (McCann & Pearlman, 1990). The painful feelings and thoughts that can accompany work with trauma survivors (Stamm, 1997).

The term that will be used in the present study to describe the result of a psychologists exposure to traumatic material will be compassion fatigue. This term is being used because the term compassion fatigue is specifically for those who work with people who have experienced traumatic events and develop empathy towards them.

Compassion Fatigue Symptoms

Cerney (1995) claims that through the interaction with traumatised clients the therapists themselves find that the traumatic experiences described to them have such an affront to their sense of self that they begin to exhibit the same characteristics as their clients. They may experience a change in the world, themselves, and their family. The therapists may experience PTSD symptoms such as having intrusive thoughts, nightmares, and generalised anxiety. Ultimately they themselves may need assistance in coping with their trauma.

The symptoms of STS that present themselves, and are under one month in duration, or within one month of the event are considered normal, acute, crisis-related reactions (DSM-IV, 1994). Those not manifesting symptoms until six months or more following the event manifest delayed STSD (DSM-IV,1994).

The diagnostic criteria for secondary traumatic stress disorder involve experiencing an event outside the range of usual experiences that would be distressing to almost anyone i.e., serious threat to the traumatised person (TP), and sudden destruction of the traumatised person's environments. Psychologists will often be working with clients who have experienced extremely traumatic events. One difference that may be important in the development of secondary traumatic stress is that psychologists enter their line of work knowing that they will have to deal with traumatised persons. Therefore they should have been trained and prepared for the exposure to secondary trauma that will be evident in their day to day working life.

Some symptoms or criteria of this disorder involve re-experiencing the trauma event through: *recollections* of the event and of the traumatised person; *dreams* of the event and of traumatised person; sudden *re-experiencing* of the event and the traumatised person; *reminders* of the distressing event and the traumatised person.

Other criteria are Avoidance/Numbing of reminders of events through: efforts of avoidance of thoughts; efforts of avoidance of activities; psychogenic amnesia; diminished interest in activities; detachment from others; diminished affect; and sense of foreshortened future. Another criteria is persistent arousal. This is demonstrated through: difficulty falling/staying asleep; irritability or anger; difficulty concentrating; hypervigilance for traumatised person; exaggerated startle response; and physiologic reactivation to cues (Figley, 1995).

Secondary traumatic stress impacts on several areas of the practitioners life including their well-being and performance of their job. The personal impact of STS can influence many factors including their cognition i.e., diminished concentration, self-doubt, apathy, and decreased self esteem. Emotional aspects are also affected through anxiety, numbness, and depression; behaviour can also be affected through having sleep disturbances, being moody, and helpless. The practitioners spiritual life can be affected through questioning the meaning of life, loss of purpose, and lack of self-satisfaction. Interpersonal relationships can be affected through withdrawal, mistrust, and isolation of friends. Finally physical aspects of the helper can be affected with shock, aches and pains, and somatic reactions (Yassen, 1995).

Secondary traumatic stress can and often does have an impact on professional functioning. Performance of the job can be affected with a possible decrease in quality of work, low motivation, and an avoidance of job tasks. Morale can also be affected with a decrease in confidence, apathy, and detachment. Interpersonal work relationships can suffer as well with a withdrawal from colleagues, poor communication, and staff conflicts. Finally behaviour in the work place may be impacted on through absenteeism, faulty judgement, and irresponsibility (Yassen, 1995). The costs for therapists, organisations, and clients is an important issue and one that deserves urgent attention

STS theory predicts that professionals affected by STS are at higher risk of making poor professional judgements than those professionals who are not affected. Examples of poor professional judgement could include mis-diagnosis, poor treatment planning, or abuse of a client (Munroe, 1995, cited in Rudolph et al. 1997)

Relational disturbances (including personal relationships) may suffer due to the increase or frequency, and intensity of stressors, increasing difficulty with maintaining intimacy and trust. Relationships with clients may also have disturbances in that the therapist may either overidentify with or detach from the client. Distancing from the client may involve judging, labelling, or pathologising the trauma reaction.

Other forms of detachment include taking up a personal and emotional distance from the client. This behaviour may include being chronically late for appointments, cancelling appointments or allowing frequent interruptions during appointments. This detachment may allow the trauma worker to deal with their feelings of vulnerability by blocking out such emotional reactions. Distancing may also take the form of withdrawal from friends and family, believing that they will not be understood (Dutton & Rubinstein, 1995; Dutton, 1992) .

Overidentification, alternatively, may mean that the trauma worker is paralysed by his or her reactions to the clients' traumatic experience, or alternatively takes excessive responsibility for the client's life.

It may be that some psychologists are more at risk of developing compassion fatigue than others. This could be because some work in more traumatic areas or because of personal factors.

> "Those who have enormous capacity for feeling and expressing empathy tend to be more at risk of compassion fatigue" (Figley, 1995, p. 1).

Literature dealing with compassion fatigue and secondary traumatic stress has been extremely limited and these concepts are only just beginning to appear in the literature. However, there is still almost no reported empirical evidence stating its prevalence. Most of the literature on compassion fatigue and its treatment has been theoretical and anecdotal (Thoreson, Miller, & Kraukoph, 1989).

The most recent research on the prevalence of compassion fatigue was completed by Rudolph, Stamm & Stamm (1997). In this study individual and organisational factors were examined to find potential risks and mediating factors in the development of secondary traumatic stress. An empirical study was done to find the level of compassion fatigue, overall quality of life, and quality of professional practice environments. In this study 37% of general health workers reported a high risk of developing compassion fatigue and 54% a high risk of developing burnout. It was found that those who had a Masters level of education and were providers were at a significantly higher risk of developing compassion fatigue and burnout than the group as a whole. Conversely, bachelor level providers were at a significantly lower risk of developing compassion fatigue and burnout than the group as a whole. In both analysis doctoral level (i.e., PhD) providers were at moderate risk.

The life satisfaction subscale developed by Kopina (1996) showed an interaction of sex by training level. Post hoc analysis showed that male doctoral level participants had a significantly higher quality of life than the group as a whole. Conversely, female doctoral and male masters level reported significantly lower life satisfaction than the group as a whole. Female masters and all bachelor level reported a moderate level of life satisfaction.

Although this study shows that over a third of the participants had a high risk of developing compassion fatigue and over half had a high risk of developing burnout the participants of the study were not psychologists. The participants were recruited from 5 locations: an ISTSS conference; a public health nurse convention; from the American Red Cross; InterPsyh; and the University of Alaska Anchorage. This sample of participants does not give an indication of the degree of risk of developing compassion fatigue and burnout for psychologists, but instead a range of mental health workers.

The Rudolph et al. (1997) study did not give any explanations as to why Master's level education providers were at the highest risk of developing compassion fatigue and burnout. It was also not explained as to why male doctoral level providers had a significantly higher quality of life than female doctoral and male masters level participants. There were equivalent numbers of participants who had a training level at the Bachelor, Masters, or Doctoral level, but 40% had only graduated from high school. Also, 37% of the participants were still in training. Both of these factors indicate that the sample chosen for the study were not professional psychologists and so results could not be generalised to this field.

Figley (1995) completed a study using the Compassion Satisfaction/Fatigue Self-Test for Helpers scale. Three hundred and seventy people were used in the study with a mean age of 35, with 33% being male and 56 % female, 11% unknown. Once again the sample used in the study were not strictly psychologists. Sixteen percent were trauma professionals, 35% were business volunteers, 8% were from the Red Cross, and 27% were caregivers in training.

In this study, the mean score for compassion satisfaction was 'good potential' at 92.10. This meant as a group they had good potential of having satisfaction with their ability to caregive (e.g. pleasure to help, like colleagues, feel good about ability to help, make contributions, etc.).

The participants' burnout score was 24.18 which meant that their risk of burnout was extremely low. That is they had a low risk of burnout (feel hopeless and unwilling to deal with work, onset gradual as a result of feeling one's efforts make no difference or very high workload). Finally the compassion fatigue score for the 370 participants was 28.78 which meant that there was a low risk of developing compassion fatigue (symptoms of work-related PTSD, onset rapid as a result of exposure to highly stressful caregiving). These results can not be generalised to psychologists in New Zealand as the participants in the study were not from the psychological field and the study was completed overseas. No information was given as to whether males were more at risk than females or vice versa, and no information was given as to the participants education level.

A much smaller study using the Compassion Fatigue Self-Test for Helpers without the compassion satisfaction subscale was completed by Figley (1995a) with only 16 participants. The participants were lay mental health caregivers in rural Africa. The compassion fatigue score was 44 which is in the extremely high risk group with a burnout score of 28.86 in the extremely low risk group. Once again the results can not be generalised to psychologists in New Zealand. This is because the participants were not trained as psychologists, and they came from rural Africa a very different environment and client base than New Zealand.

Studies investigating burnout are more prevalent in the literature involving psychologists and psychotherapists etc. They are relevant to compassion fatigue as burnout is a possible subset of compassion fatigue. Conversely compassion fatigue may be a subset of burnout. If information from the burnout studies can give information on the risk and mediating factors in developing burnout this could help in finding the risk and mediating factors of compassion fatigue.

Raquepaw & Miller (1989) completed a study on psychotherapist burnout involving 68 psychotherapists from Texas. The Maslach Burnout Inventory was used as well as demographic questions and questions designed to assess their intent to leave the profession, their treatment orientation, and their perceived ideal caseload. The results indicated that demographic variables and treatment orientation were not accurate predictors of therapist's burnout. However, psychotherapists who worked for agencies, whether part time or full time, had more symptoms of burnout than did colleagues who worked solely in private practice. Private practitioners essentially reported greater numbers of praiseworthy accomplishments and successes and fewer numbers of debilitating frustrations than did their agency counterparts. Raquepaw & Miller (1989) came to the conclusion that the source of burnout lies in social or situational factors, rather than in the people who experience burnout, and that the differences in practitioner burnout observed in the study deserved further investigation.

The study also found that the therapists' actual caseload was not associated with burnout, but their satisfaction with their caseload was. Therapists who indicated that their ideal caseload would be smaller than their current caseload were more burned out than those who were satisfied with their caseload. In addition, burnout was predictive of the therapists' reported intentions to leave psychotherapy for other professions. Further investigation is needed to determine the relation between such intention and actual rates of resignation.

Spector (1988) completed a study looking at work locus of control, the measure of generalised control beliefs in work settings. Subjects for this study comprised six independent samples including business administrators, industrial psychology undergraduates, sales and support employees, mental health agency employees, convenience store clerks, and managers. From these six samples 1165 participants were drawn to answer a number of scales and questionnaires.

The measures included the work locus of control scale, general locus of control scale, social desirability scale, job satisfaction scale, organisational commitment questionnaire, autonomy subscale, perceived influence measure, leadership questionnaire, role stress scales, and measures of job tenure, and intention of leaving their current jobs. The Work Locus of Control Scale was found to correlate significantly with job satisfaction, intention of quitting, perceived influence at work, role stress, and perceptions of supervisory style.

Farber & Heifetz (1982) completed a study on therapist burnout. Sixty psychotherapists were given a two-hour semistructured interview in order to investigate their experiences of therapeutic practice. What was found was that according to therapists, professional satisfaction derives from the ability to promote a helpful therapeutic relationship; dissatisfaction stems primarily from lack of therapeutic success, that is the inability to promote change in patients; and burnout is primarily a consequence of the nonreciprocated attentiveness, giving, and responsibility demanded by the therapists relationship. Again the sample cannot be generalised to New Zealand psychologists as the participants were all psychotherapists from the United States.

Hellman, Morrison, & Abramowitz (1986) investigated the stresses of psychotherapeutic work. A sample of 227 psychologists from Northern California were administered two likert rating scales, The Therapeutic Stresses Rating Scale and The Stressful Patient Behaviour Rating Scale. A factor analysis was completed on the results and the data revealed that the stressful aspects of therapeutic work included maintaining the therapeutic relationship, scheduling difficulties, professional doubt, work overinvolvement, and feeling personally depleted. In addition, stressful patient behaviours were found to cluster into five distinct categories: expressions of negative affect, resistance, psychopathological symptoms, suicidal threats, and passive-aggressive behaviours.

ORGANISATION AND PERSON FACTORS

Organisational or work factors and person factors interact in a multitude of ways to either reduce or increase the risk of developing compassion fatigue and burnout. Figure 2. Shows a process model of compassion fatigue and burnout. This model has been adapted from Cherniss' (1980, cited in Lefcourt, 1982) model of burnout.

The model proposes that individuals with particular career orientations, a particular internal or external WLOC, adequate or inadequate life satisfaction, an intention to quit or not, interact with particular work-setting characteristics, such as private - public settings and job title. The coming together of these factors results in the experience of particular sources of stress, such as burnout and secondary traumatic stress. Individuals cope with these stresses in different ways. Some individuals employ techniques and strategies that might be termed active problem solving while others cope by exhibiting the negative attitude changes.

If either their work environment or content of their work is causing the individual particular amounts of stress and anxiety, combined with personal factors, such as life satisfaction, then burnout and/or compassion fatigue may develop.

Many of the variables mentioned in the model are difficult to measure and determine especially in a cross-sectional study. A longitudinal study would be more effective in determining some of the variables. For example autonomy and control are difficult to determine because of differing interpretations of what control and autonomy are, for example those who have an external locus of control believe that they have no or little control over their environment and the outcomes of their work.

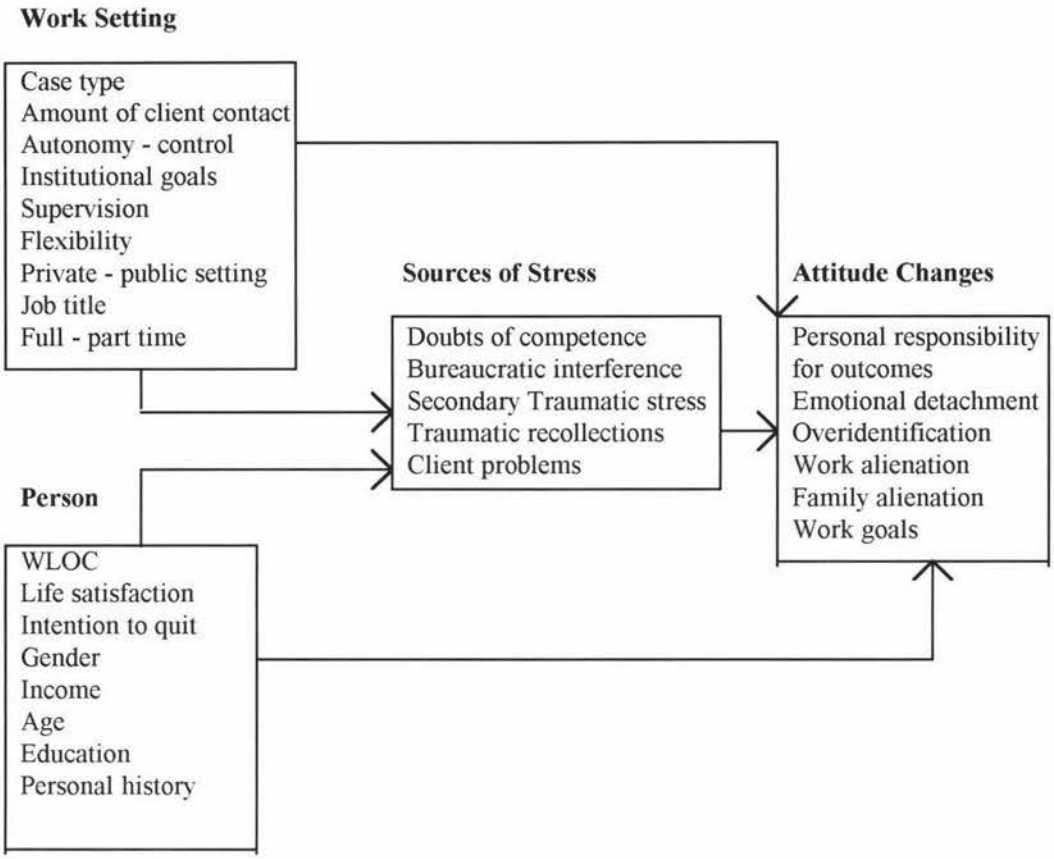

Figure 2: A conceptual model of Compassion fatigue and Burnout (Cherniss, 1980, cited in Lefcourt, 1982)

The variables that have been chosen for the present study for examination have been chosen because they can be investigated in a cross sectional study, and can be measured using scales and subscales. They have also been chosen because they are possible risk and mediating factors for the development of compassion fatigue. Burnout has been chosen because it is a risk factor for compassion fatigue and is a factor that like compassion fatigue can challenge the provider's ability to give effective services.

The public - private setting has been chosen as a factor that is important in the development of compassion fatigue and burnout. It has been chosen because literature has shown that people who work for public institutions are more likely to be burnt out than those who work for private practices (Raquepaw & Miller, 1989). Even those individuals who worked part time in public institutions were more burnt out than those who worked full time in private practice. This is why the full and part time factor was chosen as another variable. Those who work full time may have more risk of developing compassion fatigue and burnout because they have more exposure to traumatised clients.

Person factors that were chosen were chosen again because of their ability to be measured through cross sectional methods and because they are demographic variables that can be used to compare genders, ages and educational levels etc. Work locus of control was chosen as it is a factor that may be either a risk or mediating factor in the development of burnout and compassion fatigue. Those who have an internal locus of control feel that they have more control over the outcomes in their working environment, and this is possibly a mediating factor. Those who are external are more inclined to feel that outcomes in their working environment are out of their control and so is a risk factor. This needs to be examined to find which are risk and mediating factors in the development of compassion fatigue and burnout.

Life satisfaction has also been chosen as a variable as it is an important factor as either a risk or mediator. Those who are satisfied with their life feel they have more control and are less anxious. They also usually have a more balanced life style and therefore are more likely to have less risk of developing compassion fatigue and burnout. Alternatively those who are not satisfied with their lives possibly have a higher risk of developing compassion fatigue and burnout because they may have lower job satisfaction or have a less balanced life style. It would be useful to know if those who are satisfied with their lives are at a lower risk of developing compassion fatigue than those who are not satisfied with their lives.

Intention to quit has been chosen as a variable to be studied as it would be important to find if psychologists who have a high risk of compassion fatigue and burnout are more likely to have any intention to quit than those with a low risk of compassion fatigue.

Other factors that are to be measured are case type, amount of client contact, flexibility and job title for the organisational factors and for the personal factors gender, income, age, and education level are being measured.

Trauma history is certainly an important component of STS. STS theory suggests that providers with a personal trauma history would be at higher risk due to increased exposure. On the other hand, personal trauma history could be a protective factor because the provider may be less naive and may have had a chance to learn positive coping strategies (Rudolph et al. 1997). This factor is not being examined in the present study as it is difficult to determine previous trauma and compare one type of trauma to another. This is because it is a personal issue with one persons traumatic experience being extreme and another's being less so.

ORGANISATIONAL FACTORS

Burnout

There are many aspects in the psychologist's life that can impact on the development of STS. One of the more important variables is the concept of burnout. Burnout like compassion fatigue can challenge a psychologist's ability to give effective services and maintain professional and personal relationships. Burnout is a gradual wearing down of the psychologist by the feelings of being overwhelmed by one's work and feeling incapable of making any positive changes.

While certainly different from compassion fatigue and secondary traumatic stress burnout is certainly an important risk factor for compassion fatigue (Rudolph et al., 1997). Burnout and traumatisation are highly related, but there are major differences between them. Compassion fatigue, like burnout, can challenge a provider's ability to give effective services and maintain personal and professional relationships. Secondary traumatisation is more specific than burnout and often more pervasive. Burnout is a gradual wearing down of the provider by feelings of being overwhelmed by one's work and incapable of effecting positive change. Conversely, compassion fatigue is sudden and acute, and involves more traumatic responses such as nightmares, flashbacks, and disturbing recollections. Traumatic stress is also especially manifested in feelings of helplessness, shock, and confusion, and there seems to be a faster rate of recovery from the symptoms (Figley & Kleber, 1995).

Burnout refers to the psychological strain of working with difficult populations. The symptoms of burnout have been described as depression, cynicism, boredom, loss of compassion, and discouragement. Contributing factors have been described as being professional isolation; the emotional drain of being empathetic; ambiguous successes; lack of therapeutic success; non-reciprocated giving and attentiveness; and failure to live up to one's own expectation (McCann & Pearlman, 1990)

According to McCann & Pearlman (1990) working with victims may produce symptoms of burnout in mental health professionals for a number of reasons, and although the burnout literature is relevant to working with trauma victims, McCann & Pearlman (1990) agree that the potential effects of working with victims of trauma are distinct from working with other difficult populations. This is because the therapist is exposed to the emotionally shocking images of horror and suffering that are characteristic of serious traumas.

Common causes of burnout in the human services according to Pines & Aronson (1988) are: (1) they perform emotionally taxing work; (2) they share certain personal characteristics that made them choose human services as a career; and (3) they share a "client centred" orientation. These three characteristics are the classic antecedents of burnout.

A job in which a person helps others involves a certain degree of stress. The degree of stress depends on the particular demands of that job and on the resources available to the professional. In many social service occupations the danger of burnout and emotional exhaustion results from the constant demand to give emotionally on the job. The supply of emotion goes only one way - from the workers to the client - and may lead to the emotional exhaustion of the workers.

Jobs that are closely allied to life may make the separation of work from other areas of life exceptionally difficult. Exposure to others' intense feelings is a stress peculiar to the task of extending psychological help. In a sense it is an occupational hazard. When the emotional stresses inherent in providing social and psychological help are not acknowledged and dealt with, they often lead to burnout (Pines & Aronson, 1988).

Another source of stress stems from the special characteristics of the professionals themselves. Those who decide to enter into the human services area are essentially humanitarian and empathetic. They also have other traits that make them vulnerable to the emotional stresses inherent to their professions. Some professionals who work with child abuse have had personal experiences that motivated their choice of career. This personal history serves to intensify both their empathy and pain (Pines & Aronson, 1988).

The third cause of burnout according to Pines & Aronson (1988) is the "client centred" orientation that characterises human service professions almost exclusively. The focus is on the people receiving service. The professional's role of helping, understanding, and support is defined by the clients' needs. The role is not complementary: the professional gives and the client receives (Pines & Aronson, 1988).

The symptoms of burnout are extensive. Physical withdrawal from the job can show up during and after work hours. Many psychologists who are burnt out often close their doors to avoid imposition, avoid clients by arriving late for appointments, use their desks as barriers between them and their clients, and develop a need to get away from everyone, to be alone and work. They also cut to a minimum the time they spend in direct client contact.

Workers experiencing physical, emotional, and mental exhaustion tended to be consistently late for work, to take extended work breaks, and to have a high frequency of unexplained absences from work (Pines & Aronson, 1988).

Emotional withdrawal could include "turning off" compassion, empathy, and warmth, and "spacing out" during interviews with clients. Emotional withdrawal may escalate and result in total detachment and the loss of concern for the recipients of their service. Detachment may spread into relationships outside of work as well (Pines & Aronson, 1988).

Mental withdrawal consists of a set of attitudes that protects service providers from over-involvement and justifies detachment from the recipients of their services. These attitudes help the professional to see the other person as less human, to view the relationship in objective and analytic terms, and to reduce the intensity and scope of emotional arousal (Pines & Aronson, 1988).

Three aspects are important in burnout: emotional exhaustion (emotionally drained); depersonalisation (worrying the job is hardening them emotionally);and reduced personal accomplishment (not able to help someone positively). Burnout is typically the result of the extended accumulation of intensive contact with clients. It begins gradually and worsens as time goes on.

The issue of burnout is important in the development of compassion fatigue and has a large influence on how compassion fatigue can be both exaggerated and caused or alternatively prevented. If an individual is burned out and feels overwhelmed by work then he or she is more vulnerable to compassion fatigue. On the other hand if an individual employs a range of preventative measures to reduce their burnout he or she may be less vulnerable to compassion fatigue. There has not been much literature on the topic of compassion fatigue that has included the burnout factor. The reason that burnout has been included in the present study was to investigate whether burnout is a factor that influences the development of compassion fatigue.

Public Institutions and Private Practice

There are a variety of reasons as to why a psychologist may develop secondary traumatic stress disorder. One of the most obvious reasons is the confrontation on an almost daily basis of clients who have had traumatic experiences. Another less obvious reason is the management and politics that occur in health care settings, especially in the public sector of health care. The differences between public institutions and private practice in the development of compassion fatigue are going to be investigated in the present study to find whether public institutions or public practices increase the risk of developing compassion fatigue.

The current movement in healthcare at the present time, and more so now than ever, is to cut administrative overhead. This has lead to things such as increased paperwork, increased workloads, and the elimination of support systems. These cuts may show a short term advantage, but the long term savings associated with these changes are difficult to determine. Many of the cost cutting measures unfortunately may reduce support systems and positive mediators of STS. These support systems are relatively cheap to maintain and may increase the quality and decrease the cost of care (Rudolph et al., 1997).

For example better management of case loads (Chrestman, 1995; Kassam-Adams, 1995; Munroe, 1995), using Internet and e-mail resources to enhance access to consultation and information (Stamm & Pearce, 1995), increased staff time (Pearlman, 1995; Munroe, 1995), adequate leave time (Pearlman, 1995); adequate insurance that includes mental healthcare (Catherall, 1995); and adequate clinical and administrative supervision (Stamm & Pearce, 1995).

Secondary traumatic stress disorder is a major problem with institutions such as police departments, hospitals, and mental health clinics. Some issues dealing with STS are unique to certain aspects of institutional settings, including their hierarchical structure, their often impersonal nature, and their institutional mission, as well as the general nature of group dynamics.

Issues related to the hierarchical structure of institutions are that decision making powers are distributed unequally; individuals who are higher in the hierarchy have greater power. The hierarchical structure can contribute to the appearance that: (1) some people are more important than others; (2) some people cannot be expected to spend much time responding to others: and, (3) some people are more replaceable than others (Catherall, 1995). This gives a feeling that one is not in control of their work environment and that one has no power to make decisions that affect them.

For those who have an internal locus of control and believe that outcomes are caused by their own actions, they may feel disempowered and feel that they have no control over their work. Whereas those who have an external locus of control do not feel the effects of hierarchy and are less concerned with it.

Issues related to the impersonal nature of many bureaucracies are that some institutions are overly routine and rule driven. Over time, dealings can become too narrowly focused, giving less decision making authority to make exceptions or exercise discretionary power. This leads to the disempowerment of both clients and staff. An institution that cannot be flexible and make allowances for the personal needs of individual workers is a poor environment for people working with trauma (Catherall, 1995).

Private practice work is quite different from public institutions in many aspects. Private practices are much more flexible than public institutions in the way that they can choose which clients they will consult with and also the number of clients they will see at any one time.

There is usually more revenue in private practice so administrative responsibilities, and paperwork are less of an issue. Support systems such as regular supervision and group supervision are a more regular event for private practices.

There is usually still a hierarchy system in private practice with senior psychologists and training psychologists, but decision making is often done by all of the psychologists and is not left up to management and policy makers. Because the private practice situation is so much smaller it can be more personal. This means that decisions can be made on a one by one client basis and exceptions can be made.

The differences between the two work settings can often be what makes the difference between developing compassion fatigue and burnout or not. The current trend towards reducing overheads in public institutions has meant that psychologists are more likely to be either worn down by their work environment (burnout) or by the content of their work (STS).

PERSON FACTORS

Locus of Control

Stamm & Pearce (1995) argued that the professional's susceptibility to STS stems from two basic areas: (a) lack of control, and (b) questions of competency. Both of these are related issues. Questions of competency, in part, arise from the professional's feelings of lack of control of traumatic material. Controlling the trauma is therefore a necessary component of competency. When people feel as if they are prepared, or at least have the ability to act positively during the event there is a better eventual outcome. When people feel as if they have no control, the prognosis is quite poor.

Direct control, however, is not always possible when dealing with traumatic stress. In these situations, monitoring or limiting the professional's exposure and/or validating their distress over lack of control may be the keys to regaining authority over the traumatic material, and thus a renewed sense of competency. Positive peer social support and supervision are crucial elements in preventing or at least blunting STS (Stamm & Pearce, 1995).

Control is different from locus of control in that control is the freedom that employees are given to make decisions about their work. Often, individuals are allowed to have input into broad policy issues that afford them an expanded sense of control in the organisation. Such a sense of control can increase an individuals job satisfaction. Control is difficult to disentangle and determine as some individuals are satisfied with being controlled by organisations and others prefer little control over their decisions about work. Control is also situational and can change from decision to decision. Locus of control is an enduring trait where people attribute the cause or control of events either to themselves or to the external environment.

Locus of control differs from public institutions to private practice work. Those individuals who have an external locus of control may be predisposed to working for public institutions, whereas those who have an internal locus of control will probably prefer private practice work. This is because internals are individuals who ascribe control of events to themselves, and believe that by working hard and having control will bring about rewards.

Locus of control has been focused on because it is enduring across an individuals lifetime and is generally easy to measure. Alternatively control is hard to measure and changes according to the situation the individual is in.

Locus of control is a cognitive variable that represents an individual's generalised belief in his or her ability to control positive and negative reinforcements in life. Locus of control is a personality variable that has been studied in a wide variety of settings including organisations. The organisational studies have been dominated by the use of Rotter's (1966, cited in Spector, 1988) Internality-Externality measures and scale of general locus of control, that is, internal and external locus of control.

Locus of control is defined as a general expectancy that rewards, reinforcements or outcomes in life are controlled either by one's own actions (internality) or by other forces (externality). In the work setting, rewards or outcomes are promotions, favourable circumstances, salary increases, and general career advancement. Beliefs about control of reinforcements can have an effect on work attitudes.

Locus of control relates to job performance, leadership performance, leadership behaviour, perceptions of the job, and work motivation. It also correlates significantly with job satisfaction. The more internal a person scores, the higher his or her job satisfaction tends to be. Those with an internal locus of control have been shown to be more satisfied with their jobs than externals, see their supervisors as higher on consideration and initiating structure, report less role stress, perceive more autonomy and control, and stay longer in their jobs (Spector, 1982)

In this study Rotter's (1966) general measure of locus of control assesses how a person tends to feel across all domains of life. Domain specific measures are available that assess how a person feels about a particular aspect of life. For the work domain, Spector (1988) developed the Work Locus of Control Scale to assess how people feel concerning control of reinforcements only in the workplace. This scale has been shown to correlate with job satisfaction often at a higher level than does general locus of control (Spector, 1988).

The relation between work locus of control and job satisfaction has been hypothesised as being mediated by job performance. Internals tend to perform better than externals, and if job performance is associated with rewards, satisfaction with the job might result. Internals have a higher job satisfaction because they benefit from the rewards of their better job performance (Spector, 1997).

Locus of control in the work place also relates to secondary traumatic stress. If the individual is internally controlled they are less anxious and they perform better on the job than externals (Spector, 1982). When the professional has better job satisfaction, performs better on their job and is less anxious they are less likely to develop STS.

Locus of control is to be investigated in the present study to find whether externally controlled individuals have a higher risk of developing compassion fatigue than internally controlled individuals.

Life Satisfaction

Life satisfaction is an important factor influencing secondary traumatic stress. There are many issues surrounding life satisfaction that can mediate the effects of compassion fatigue or alternatively cause compassion fatigue. Life satisfaction refers to a person's feelings about life in general. It can be assessed on the facet level as satisfaction with specific areas of life, such as recreation or family. It can also be assessed globally, as overall satisfaction with life.

Because life satisfaction reflects overall feelings about life, it is considered a measure of emotional well-being. Life satisfaction is to be investigated in the present study to find if those who are dissatisfied with their lives are more at risk of developing compassion fatigue than those who have a high life satisfaction.

Job satisfaction is an important variable of life satisfaction as a person who is satisfied on the job is likely to be satisfied with life in general. It is possible that job satisfaction causes life satisfaction, or the reverse. That is, each type of satisfaction affects the other.

There are many factors that affect job satisfaction and therefore indirectly influence life satisfaction. Age is related to job satisfaction, in general job satisfaction increases with age. Life satisfaction is also related to organisational constraints, in the way that employees who perceive high levels of constraints tend to be more dissatisfied with their jobs. This factor could be related to the public Vs private sector, where public sector employees are more constrained than private practice workers. Therefore, public workers are likely to be less satisfied than private practice workers.

Work load is another factor that relates to job stress. Workload has been found to correlate with job dissatisfaction as well as other job strains (Spector, 1997). Control is another issue related to job satisfaction. When individuals have control over decisions being made in their organisation, such as broad policy issues that afford them an expanded sense of control in the organisation, this then has positive effects on a person's job satisfaction.

Job satisfaction was also found to be higher with those who had a flexible work schedule rather than a fixed work schedule, with part-timers being more satisfied than full-timers with their jobs (Spector, 1997).

Job satisfaction is also correlated with job turnover. People who dislike their jobs will try to find alternative employment. Job dissatisfaction leads to turnover. Characteristics of the individual combine with characteristics of the job environment in determining level of job satisfaction. If the job satisfaction level is sufficiently low, the person will develop a behavioural intention to quit the job. That intention may lead to job search activities, which if successful will lead to job turnover. Life and job satisfaction correlates well with intention of quitting the job.

Intention to quit

Intention to quit is a variable that leads directly off job satisfaction. Most theories of turnover view it as the result of employee job dissatisfaction (Spector, 1997). People who dislike their jobs will try to find alternative employment. There seems to be strong causal correlation between job satisfaction and turnover, that is job dissatisfaction leads to turnover (Spector, 1997). Intention to quit is a factor that is being investigated in the present study to find if those who have a high risk of compassion fatigue are more likely to have an intention of quitting.

Models of turnover place job satisfaction in the centre of a complex process that involves factors both inside and outside of the employing organisation. Figure 3. is a simplified model that shows how this process might work. Characteristics of the individual combine with characteristics of the job environment in determining level of job satisfaction. If job satisfaction levels are sufficiently low, the individual will develop an intention to quit the job. This intention may lead to job searching activities, and if this is successful will lead to turnover. Alternative employment opportunities are important because a person is unlikely to quit without an alternative job offer. The causes of job satisfaction were discussed previously, with both employee and workplace factors being found to result jointly in job satisfaction.

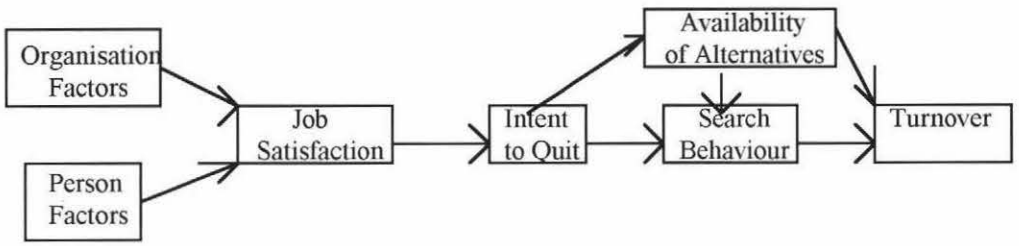

Figure 3. Model of Employee Turnover as a function of Job Satisfaction and Unemployment Rate (Spector, 1997).

Models of intervention with STS among trauma workers have yet to be widely developed. Strategies for responding to STS reactions may be grouped into three areas: work-related strategies, informal strategies, and personal strategies. Work related strategies may include adjusting one's caseload to include a diversity of clients, thus reducing one's amount of contact with severely traumatised clients.

Alternatively, diversifying one's work related activities beyond client contact with trauma victims/survivors (e.g., teaching, supervision, research) may provide sufficient distance to reduce the impact of working exclusively with severe trauma. Another work related strategy is the availability of supervision consultation and/or peer support that allows for the emotional safety necessary for trauma workers to talk about their STS reaction in an environment that provides support and comfort. Supportive supervision has been found to correlate with relieving stress in mental health professionals (Dutton & Rubinstein, 1995).

Informal strategies include general self-care activities, such as maintaining strong personal support networks of family and friends, developing diverse interests, and seeking positive experiences outside of work (Dutton & Rubinstein, 1995).

Personal strategies may involve trauma worker's own use of personal psychotherapy to address not only the various effects of STS reactions, but also the factors that may mediate their impact (e.g., concomitant stresses) or that render the trauma worker initially more vulnerable (e.g., prior abuse history).

These strategies may address trauma workers' idealised expectations about their work and the excessive responsibility they may take for their clients' improvement or success, as well as for failures or lack of progress. The development of increased personal awareness is essential in order that trauma workers can monitor the impact of their work and respond effectively in a timely manner (Dutton & Rubinstein, 1995).

Organisational issues should be included in research agenda so that information on what institutions should do to reduce the risk of compassion fatigue can be found and implemented.

METHOD

Hypotheses

On the basis of the research and theory discussed previously, six hypotheses relevant to compassion fatigue and burnout have been proposed.

Hypothesis one: Psychologists who work in public institutions are at a higher risk of developing compassion fatigue and burnout than those who work in private practice.

Hypothesis two: Those psychologists who have an intention to quit the field of psychology will have a higher risk of developing compassion fatigue and burnout than those psychologists who have no intention of quitting.

Hypothesis three: Those psychologists who have an external work locus of control will be more likely to have a higher risk of developing compassion fatigue and burnout than those who have an internal work locus of control.

Hypothesis four: Those psychologists who have a low satisfaction with their lives will have a higher risk of developing compassion fatigue and burnout than those psychologists who have a high satisfaction with life.

Hypothesis five: Males and females will have an equal risk of developing compassion fatigue and burnout. That is neither gender will have a higher risk of developing compassion fatigue and burnout than the other.

Hypothesis six: Those who work full time will have a higher risk of developing compassion fatigue and burnout than those who work only part time.

Participants

The participants were drawn from a mailing list of five hundred and fifty psychologists held by the New Zealand Psychological Society. The psychologists on the mailing list were members of the New Zealand Psychological Society and came from throughout New Zealand. All participants who were in direct contact with clients and had correctly and fully completed the questionnaire were included in the study. Those participants who were not in direct contact with clients and those who were student members were excluded from the study.

One hundred and sixty one useable questionnaires were returned, giving an overall response rate of 30%. Of those who returned their questionnaires 60% were females and 40% were males. The average age of the participants was 47.

Measures

Rationale for Measures

Work Locus of Control Scale (Spector, 1988)

The Work Locus of Control Scale used in the present study was one developed by Spector (1988). This is a 16 item measure of generalised control over beliefs in work settings that was selected so that the participants work locus of control could be calculated. Once their score had been calculated it could be used to investigate whether psychologists as a whole had an internal or external work locus of control, and also to find out if work locus of control could predict compassion fatigue and burnout. This scale was modified for the present study. The changes were made to better accommodate the sample of people being investigated.

The scale was modified on questions 6, 12, and 16, so any question that mentioned 'money' was changed to 'success'. For example an original question for the scale was "Making money is primarily a matter of good fortune". This was changed to "Being successful is primarily a matter of good fortune". Also question 5 was modified from "Getting the job is mostly a matter of luck" to " Being successful is mostly a matter of luck". The measure had an equal number of internal and external questions, and correlates well with general locus of control measures, but predicts work behaviour more precisely than the general scales.

The scale was tested on 6 samples, however, it was not tested on the same subjects more than once. Therefore, there were no estimates of test-retest reliability. It is desirable to have an acceptable level of test-retest reliability, as the nature of work locus of control is a stable characteristic and does not change over time. Evidence of internal consistency is provided by coefficient alpha (overall $\alpha = 0.85$) (Spector, 1988). Several tests assessing the differences in correlations between WLOC and several other variables, supported construct validity, as did mean level difference tests

Due to thorough testing of the 'Work Locus of Control Scale' and the detailed psychometric information provided by Spector (1988) on this scale, a reasonable degree of confidence can be placed in the reliability and validity of this measure.

Life Satisfaction Scale - Life Spheres sub-scale

The measure of life satisfaction through the Life Spheres sub-scale was developed by Kopina (1996) and was taken from a study by Rudolph et al. (1997). Only the sub-scale was used because it seemed to relate more to personal and professional satisfaction, which was what was needed for the present study. The sub-scale was used to investigate how satisfied the participants were with their personal, professional lives. The personal questions related to family, friends, health, hobbies, while the professional questions related to how satisfied they were with their jobs (i.e., work content, work roles etc.), and their future expectations and prospects.

This sub-scale is part of a larger three sub-scale measure. The sub-scale is a 12 item self-report measure of psychosocial stressors and their effects on life satisfaction. This scale was originally designed to measure the long-term effects of psychosocial stress on the life satisfaction of survivors of the Chernobyl Nuclear power plan accident seven years after the catastrophe.

The Life satisfaction scale originally developed by Kopina (1996) has been used in a number of studies since (e.g. Rudolph et al., 1997). In the Rudolph example 179 men and women who were (a) from the 1996 ISTSS conference (b) Alaska Public Health Nurse Convention (c) American Red Cross, (d) InterPsyh, and (e) University of Alaska Anchorage. An estimate of the stability of scores over time was not reported by Rudolph et al. (1997). Rudolph et al. (1997) reported a reliability estimate of 0.89 for the Life Spheres sub-scale. Validity estimates were not reported by Rudolph et al. (1997).

Confidence in the 'Life Spheres' scale is limited by the lack of psychometric information available. However the scale is quite a recent development and the maturity of the psychometric information has not yet been developed.

Compassion Fatigue Self Test

The compassion fatigue self test was developed by Figley & Stamm (1996). This is a 40-item self-report measure of Compassion fatigue and Burnout. It measures both trauma and burnout symptoms. It can be used as an indicator of potential problems that should be diagnostically examined rather than as a diagnostic device in and of itself. It generally measures the risk of developing both compassion fatigue and burnout, and has previously been used for adult human service fields, including psychotherapists, teachers, public safety personnel, etc.

The samples in the research by Rudolph et al. (1997) are detailed above. Figley & Stamm's (1996) research consisted of 370 people, 58 were trauma professionals, 130 were business volunteers, 30 were from the Red Cross, and 102 were caregivers in training. An estimate of the stability of scores over time was not reported. This is not so important as the scale asks for the respondents to respond to their current situation, and so the score will not be consistent over time. Rudolph et al. (1997) reported co-efficient α's ranging from .76-.94. Figley and Stamm (1996) found an alpha of .87 for compassion fatigue and .90 for burnout. No information on validity could be found.

Internal consistency estimates for the Compassion Fatigue Self Test are good, both for the research by Rudolph et al. (1997), and Figley & Stamm (1996). However, the lack of further psychometric information and any detail regarding the development of the scale limit confidence in this scale.

Questionnaire Development

The present questionnaire (see appendix B) was developed after much investigation and careful thought about the important issues surrounding compassion fatigue and burnout risks for mental health workers. Existing scales were used where acceptable measures of the constructs could be found. To simplify the layout of the questionnaire and to make it logical and easy to follow, a number of sections were developed and the appropriate questions and scales included within each section.

Demographic Information

The demographic information section included general demographic questions concerning gender, age, ethnic group, marital status and annual income.

Work Details

The 'work details' section investigated issues surrounding employees' work lives. For example, their current job title, whether they work part time or full time, the setting in which they work (i.e., private practice or public agency). The percentage of total professional time spent on certain activities (i.e., direct contact with clients, indirect contact, etc.), also where the professional got their referrals from, and what cases they were involved in most often.

Professional Satisfaction

The 'professional satisfaction' section was used to determine how much flexibility the professional had in choosing what cases they wanted to work with, whether they had any intention of quitting the field of psychology within the next twelve months, and if so they were asked for a reason for this.

Work Locus of Control

This section consisted of the Work Locus of Control Scale developed by Spector (1988). As noted above the researcher modified the WLOC scale.

Life Satisfaction

This section consisted of the Life Satisfaction sub-scale 'Life Spheres'.

Compassion Fatigue and Burnout Section

This section consisted of the Compassion Fatigue Self Test developed by Figley and Stamm (1996).

Qualitative Section

This section asked the participants to write down any additional comments related to the questionnaire, with lines drawn so that comments could be made.

Scoring

The Work Locus of Control Scale was constructed using a 6 point likert scale (1 representing 'disagree very much' and 6 representing 'agree very much'). The Life Spheres scale consisted of a 5 point likert scale (1 representing 'completely unsatisfied and 5 representing 'completely satisfied). The Compassion Fatigue Self Test was constructed using a 5 point likert scale (1 representing 'Rarely/Never and 5 representing 'very often'). Where information was given detailing the scoring process used in earlier research, item scores were generally summed and averaged to obtain final scores (e.g. Figley & Stamm, 1996; Spector, 1988). Information on scoring was provided for the WLOCS and compassion fatigue self test, but not for the life spheres sub-scale. In the present research, all item scores were summed and averaged to obtain final scale scores.

Procedure

The first step in the procedure for the study was to design the questionnaire to be administered. The self report measures that were chosen, apart from the WLOCS, were chosen because a study by Rudolph et al. (1997) had used them in a similar study overseas. Comparing results between the studies could be beneficial, to see the difference in compassion fatigue and burnout between New Zealand and overseas psychologists. The WLOCS was included as an individual's locus of control is an important variable in how he or she interacts with their work environment and how they cope with stress and anxiety.

The professional questions (i.e., have you any intention of quitting; what type of agency do you work for; do you work full or part time) were asked so if any psychologists had a high CF or burnout it would be possible to find out what situation they worked in etc. An open ended section was included at the end of the questionnaire to provide respondents with the opportunity to comment on compassion fatigue and burnout if they wished to do so.

Once the questionnaire and information sheet had been designed the New Zealand Psychological Society was contacted to enquire whether they could be sent out with their monthly magazine 'connections'.

A five - page, eighty six - item questionnaire that included four research instruments, a background questionnaire, a self addressed envelope, and a letter that described the study and assured confidentiality was sent at the end of May 1999. Five hundred and fifty were sent out with the mail-out to all New Zealand Psychological Society members (excluding those who were student members). A follow up notice in the Connections newsletter to encourage potential subjects who had not yet returned the questionnaire to do so was sent two months later.

One hundred and sixty eight questionnaires (31%) of the total mail out were returned over the next three months. However, seven of these were incorrectly filled out or incomplete. The final sample consisted of 161 registered and licensed psychologists, a 30% rate of return. The quantitative results were analysed using multiple regression and ANOVA's, as well as descriptive statistics. The qualitative results were analysed to find common themes, thoughts and experiences that psychologists reported in the open ended section of the questionnaire.

Design

The design of the study is a self report, cross sectional questionnaire, including an open ended section for the respondents to write their own thoughts and experiences on the subject.

RESULTS

Data Entry

The data were entered into Microsoft Excel by the researcher. Qualitative data were categorised under descriptions that adequately accounted for all responses. The accuracy of data entry was checked on 10% (16) of the questionnaires, which were selected according to a list of random numbers. The quality of the data entry was found to have a high level of accuracy, with mistakes occurring on only .03% of all items. Because this initial check indicated a high level of accuracy, no further accuracy checks were made.

Missing Data

The amount of missing data was calculated according to a 35% drop off limit. That is respondents were dropped from the scale if they had completed fewer than 35% of the items within the scale. Seven respondents were removed from the study altogether due to not filling over 35% of the entire questionnaire. Having eliminated the responses from these seven participants, the number of participants in the research fell to the final total of 161.

Missing values were replaced by scale means because this was the most neutral method of estimation available. Of course, because the estimated scores made up only .08% of overall scale scores, the method of estimation would not have had a significant influence on the overall results.

Descriptive Information

Demographic Information

Table 1 summarises the demographic information for the present sample. Of the 161 respondents the age of the psychologists ranged from 76 to 25, with a mean of 47.62 (SD = 10.18).

Men (39.75 %) and women (60.25%) were not represented equally with many more women responding to the questionnaire than males. This could however reflect the number of males to females working in the field of psychology.

For the highest qualification of the participants 9 psychologists (5.5%) had gained a BA degree; 56 had gained a MA degree (34.7%); 69 had an MA plus a diploma (42.8%); and 29 had a PhD (18%). Their current job titles showed that 70 (43%) were registered psychologists; 61 (37.8%) were clinical psychologists; with the rest being a mix of various mental health professionals

Forty one of the psychologists worked part time (25.5%) and 119 worked full time (74.5%). For primary employment most worked in either private practice 65 (40.3%), or for a public agency 77 (47.8%). The mean amount of time a psychologist worked in direct service was approximately 52.67% of the time. The other activity that took almost all of the rest of the time was indirect client service (21.5%) such as paperwork.

The top 8 categories of caseloads that were most common for psychologists to spend time working with were depressive disorders (10.8%); anxiety disorders (9.37%); relationship cases (8.89%); conduct disorder/ADHD (7.5%); adult sexual abuse cases (5.9%); PTSD disorders (5.36%); and child sexual abuse cases (4%). The largest amount of time was spent on a category labelled 'other' (22.89%). These were cases not already listed and included cases such as violent offenders, special education, and pain disorders.

The participant's intention of quitting the field of psychology in the next twelve months showed that 114 (70.8%) had no intention of quitting. Twenty of the participants (12%) had almost no intention of quitting; 11 participants (7%) had a moderate intention of quitting; 11 (7%) had a quite high intention of quitting; and 6 (4%) had a strong intention of quitting in the next twelve months. Forty eight of the 161 (29.8%) psychologists had an intention on some level to leave the field of psychology in the next twelve months.

Thirty seven of these 48 gave a reason for their intention to quit. The most common reason for leaving was inadequate professional support (40.5%), followed by inadequate remuneration (18.9%), the three other reasons: dislike for the work; non-work related reasons; and other were equally distributed at 13.5% each.

Table1

Demographic Information showing the Frequencies and Percentages for the Categories of the Main Demographic Variables

Variable	Frequency	Percentage
Age	47.62	
Gender		
Male	64	39.75
Female	97	60.25
Education		
Bachelor	9	5.5
Masters	56	34.7
Diploma	69	42.8
PhD	29	18
Job Title		
Registered Psych.	70	43
Clinical Psych.	61	37.8
Therapist	1	0.6
Counsellor	5	3
Lecturer	7	4
Educ. Psych.	5	3
Directors	12	7.5
Time		
Part	41	25.5
Full	119	74.5
Setting		
Private	65	40.3
Not for Profit	14	8.6
Public	77	47.8
For Profit	5	3.1
Top 8 Case loads		
Depressive Disorders		10.8
Anxiety Disorders		9.37
Relationship Cases		8.89
Conduct Disorder/ ADHD		7.5
Adult Sexual Abuse Cases		5.9
PTSD Disorders		5.36
Child Sexual Abuse Cases		4
'Other'		22.89

Scales and Subscales

Work locus of Control Scale

The mean for the Work Locus of Control Scale (Spector, 1988) was 39.26 with a standard deviation of 8.94. This score in line with Rotter's I-E Scale was skewed towards internality. This indicates that as a whole the sample of psychologists has an internal locus of control, and believe that outcomes in life are controlled by one's own actions.

Life Spheres

The mean for the Life Spheres subscale from the Life Satisfaction Scale (Kopina, 1996) is 44.32 (SD = 6.84). The average rating for life spheres was 3.65 which is between the point of being somewhat satisfied and mainly satisfied. Overall the psychologists in this study are mainly satisfied.

Compassion Fatigue Self Test

For the Compassion Fatigue Self Test (Figley & Stamm, 1996) the average compassion fatigue score was 34.75 (SD = 8.58). With an average score of 34.75 the psychologists in the present study have a moderate risk of developing compassion fatigue. The average burnout score in this study was 32.85 (SD = 8.74). With this average score the psychologists in the present study have a high risk of developing burnout.

There were 32 (19.8%) psychologists and professionals who had a score for compassion fatigue of 41 or more. With scores of 41 or more the professional has an extremely high risk of developing compassion fatigue. Thirteen (40%) of these professionals were registered psychologists, and 16 (50%) were clinical psychologists. Twenty two (68.7%) of these high risk individuals were from the public sector, and 6 (18%) from the private sector. Four were from a not for profit agency. Seventeen (53%) of the extremely high risk professionals had some intention of quitting their job. Their main reason for quitting was inadequate professional support 52% of the time and inadequate remuneration 17.6% of the time.

Table 2

The means and standard deviations for the categories of the scales and subscales

Scales/Subscales	Mean	Standard deviation
Compassion Fatigue	34.75	8.58
Burnout	32.85	8.74
Work Locus of Control	39.26	8.94
Life Spheres Subscale	44.32	6.84

There were 18 (11%) professionals who had an extremely high risk of developing burnout. These were 12 females and 6 males, of whom 8 (44%) were clinical psychologists, 5 (27%) were registered psychologists and 2 were lecturers, 2 were directors and 1 was a therapist. Fourteen (77%) of these professionals were from the public sector, 2 (11%) were from the private sector and 2 (11%) from a not- for- profit agency.

Qualitative Information

The information gained from the qualitative section at the end of the questionnaire gave some unique and interesting thoughts and experiences that would not have been gained if that section had not been included. The qualitative sections were read and categorised into sections of similar thoughts and experiences. These sections were: Has been previously compassion fatigued or burnt out; Those who have left the field and returned; Those who have sought help; Why they feel compassion fatigued, burnt out; those who have moved from the public to private sector; and recommended coping strategies.

Ten of the 32 respondents who wrote in the qualitative section had previously been either burnt out or compassion fatigued. They had either sought help, left the field of psychology, or found solutions and coping strategies to deal with their stress.

"I have previously been burnt out to the point of a breakdown both physically, emotionally and health wise. I now work part time and try to have a more balanced life."

"In my first few years of practice, I came close to burnout through overidentifying with clients and receiving insufficient supervision. Knowledge of safe practices and early warning signs, together with regular supervision keeps me stable and with a good balance."

"I have moved from primarily being a practitioner dealing directly with clients to supervisory and training others, My choice to make this move was based on issues of burnout and stress after 14 years as a clinical psychologist."

Two of the respondents wrote about how they were previously burnt out and left the field of psychology for a length of time.

"I have left once and returned because of the work environment and situation. I've now moved from public to private practice, and feel much better. It's the politics not the clients that lead to burnout."

One psychologist told of how she sought help to deal with the problems she was facing at work and knows of many of her colleagues who have had to have help in overcoming traumatic experiences.

"Many of my colleagues and myself have had to seek therapy and emotional supervision as a result of our work."

There are a variety of reasons why the respondents felt burned out and fatigued. Some responses were that they felt pigeonholed in their job; were overidentifying with clients; they had insufficient support. Many of the reasons as to why they felt so burnt out and fatigued were to do with management; too much admin. and paperwork; case loads too high; more time accounting for time rather than client time. One psychologist wrote about how the public sector management was prescriptive in its methods and the conditions were deteriorating.

> "I have seen colleagues very distressed, and I too feel the pressure to perform 'flawlessly' an impossible goal"

> "The cases I see now are more severe than ever before. Management is becoming increasingly prescriptive in its methods of working and work conditions are deteriorating. More time is spent accounting for time and there is less time for client contact."

Six of the respondents told how they had moved from the public sector and into private practice so as to escape the public sector's working conditions and bureaucracy.

> "I was compassion fatigued and burnt out when working with a public institution. I now am in private practice and am as 'happy as the proverbial sandboy."

> "I think at times I may have felt more negatively about clients, when in the hospital system. That was due mainly to a perceived lack of support and hostility from the management than to any client characteristics. In my present self-directed, private work there is far less pressure, though there can be a lack of (formal) collegiality."

Several coping strategies were given by the respondents as to how to deal with traumatic experiences heard during client contact. Some examples of these are: learning safe practices and early warning signs; regular supervision; work part time; experience and personal knowledge helps. One of the most common suggestions for how to cope was to balance and make compatible one's professional and personal life.

"I have considered leaving because it's too hard and I'd like to deal less with peoples pain: so

1. I reduced my sexual abuse cases
2. I reduced my work load
3. I joined a choir and increased my aerobic exercise."

" I work 35-40 Hrs as a psychologist and 10 to 30 Hrs in my own business so as to balance the effect of intense work with clients."

"I work in an area of trauma and effects are minimal because of:

1. Part time work
2. Good support teams
3. A busy and happy personal life

Table 3

Summary and frequency of what was found in the 32 qualitative data responses.

Statement	Frequency
Have previously been burned out or fatigued	10
Have left the field of psychology and returned because of being previously burned out and fatigued	2
Has sought help to deal with burnout and compassion fatigue	1
Moved from the public sector to private practice work	6

Relationships among Measures

Pearson Correlation Coefficients

Pearson correlation coefficients were calculated to investigate the relationships between the 10 measurements and the compassion fatigue score. According to the effect size criteria, of the 24 statistically significant correlations in Table 4, 8 are significant at the .05 level of significance, and 16 are at the .01 level of significance.

Table 4

Pearson Correlation Matrix for the 10 Measurements and the Compassion Fatigue Score

Var.	C/F	wloc	lifes	quit	empl	time	title	educ	age	gend	inco
C/F	1.00										
wloc	**.221****	1.00									
lifes	**-.440****	**-.321****	1.00								
quit	**-.365****	-.076	**.200****	1.00							
empl	**.211****	.032	**-.176***	**-.228****	1.00						
time	**-.212****	-.120	.010	.055	.065	1.00					
title	-.123	.064	-.056	.057	.063	**.147***	1.00				
educ	.056	.066	-.052	.028	.067	**-.149***	-.034	1.00			
age	-.048	-.042	**.234****	.018	**-.227****	**-.153***	**.131***	-.052	1.00		
gend	**.209****	.029	-.059	-.095	-.054	**-.173***	**-.199****	.036	**-.253****	1.00	
inco	**-.170***	**-.143***	.067	.022	.011	**.390****	**.228****	.073	.024	**-.266****	1.00

The correlations that are in bold are those that are significant.

Correlations with one asterisk (*) are significant at the .05 level of significance.

Correlations with two asterisks (**) are significant at the .01 level of significance.

(Note): The dependent variable of compassion fatigue (C/F), and independent variables of 'Work Locus of Control' (WLOC), 'Life spheres' (lifes), 'intention to quit' (quit), 'work setting' (empl), whether they are 'full or part time' (time), 'job title' (title), 'education' (educ), 'age', 'gender' (gend), and 'income' (inco).

The variables that have a significant relationship with compassion fatigue are WLOC, life spheres, intention to quit, where they're employed, amount of time at work and their gender. The WLOC scores were positively associated with compassion fatigue so the higher the individuals WLOC score and therefore externality the higher their risk for developing STS.

The life spheres scores were negatively related to CF and this indicates that as the individuals satisfaction with their life spheres decreased, the risk of developing STS increased and vice versa. The intention to quit correlation showed that the higher the individuals intention to quit the lower their risk of developing STS was, and vice versa. This was an interesting and unexpected finding from the present study. The hypothesis was that those who had a higher intention of leaving would have higher level of compassion fatigue. The opposite was found to be true. An explanation of this could be that they feel they are in control of their jobs, and have made a decision to quit, so they no longer feel the pressure to perform flawlessly and are more at ease.

The agency or practice that the participants worked in was positively associated with CF and this meant that if you were a private practitioner you were at less risk of developing CF than either a not for profit agency, a public agency or for profit agency worker. These were scored with private as 1, not for profit agency as 2, public agency as 3 and for profit as 4.

Time was significantly negatively associated with CF. This indicates that the less time i.e. part time, spent at work the less risk of developing CF. This is because less time is spent in direct contact with clients and more time is spent on other activities rather than work.

Gender was significantly positively related to CF and this shows that female practitioners are more at risk of developing CF than males.

Life spheres was negatively associated with WLOC and shows that the less satisfied the individual was with their life spheres the higher their WLOC scale was and therefore the more external they were. Life spheres was also negatively correlated with employment showing that those who worked in the public sector were more likely to be dissatisfied with their lives both professionally and personally. Life spheres was positively correlated with age indicating that the older the individual was the more satisfied they were with their lives.

Intention to quit was negatively correlated with employment showing that those who worked in public agencies were more likely to have an intention of quitting than those who worked in private practice.

Pearson Correlation Coefficients were calculated to investigate the relationships between the 10 measurements and the burnout score. According to effect size criteria, of the 21 statistically significant correlations in Table 5, 7 are significant at the .05 level of significance and 14 are at the .01 level of significance

Table 5

Pearson Correlation Matrix for the 10 Measurements and the Burnout Score

Var.	burn	wloc	lifes	quit	empl	time	title	educ	age	gend	inco
burn	1.00										
wloc	**.335****	1.00									
lifes	**-.626****	**-.321****	1.00								
quit	**-.393****	-.076	**.200****	1.00							
empl	**.283****	.032	**-.176***	**-.228****	1.00						
time	-.177	-.120	.010	.055	.065	1.00					
title	.033	.064	-.056	.057	.063	**.147***	1.00				
educ	-.007	.066	-.052	.028	.067	**-.149***	-.034	1.00			
age	-.082	-.042	**.234****	.018	**-.227****	**-.153***	**.131***	-.052	1.00		
gend	.033	.029	-.059	-.095	-.054	**-.173***	**-.199****	.036	**-.253****	1.00	
inco	-.028	**-.143***	.067	.022	.011	**.390****	**.228****	.024	.024	**-.266****	1.00

The correlations that are in bold are significant

Correlations with one asterisk (*) are significant at the .05 level of significance.

Correlations with two asterisks (**) are significant at the .01 level of significance.

(Note): The dependent variable of burnout (burn), and independent variables of 'Work Locus of Control' (WLOC), 'Life spheres' (lifes), 'intention to quit' (quit), 'work setting' (empl), whether they are 'full or part time' (time), 'job title' (title), 'education' (educ), 'age', 'gender' (gend), and 'income' (inco).

A high score on the WLOCS equates to an external work locus of control. WLOC was significantly and positively related to burnout. This shows that the higher the participants scores on the WLOCS the higher the risk of the individual developing burnout.

Burnout was negatively related to the individuals intention to quit. This meant that the more the individual wanted to quit the lower their risk of developing burnout. This could be explained in the same way as above concerning the negative relation of compassion fatigue to intention to quit.

Life spheres was also negatively correlated with burnout indicating that for the present study the more satisfied the individual was with their life the less likely they were to develop burnout. Life spheres was negatively related to WLOC showing that the more internal the individual's locus of control, the more satisfied they were with their personal and professional lives.

Employment was positively correlated with burnout, indicating that if an individual worked in the public sector they were more likely to develop burnout. Employment was again negatively correlated with life spheres showing that private practice employees were more satisfied than public sector employees.

An interesting fact was that gender was not correlated with burnout, as it was with compassion fatigue. Unlike compassion fatigue women are not more likely to develop burnout than males.

Standard Multiple Regression

Standard Multiple Regression analyses were performed for the two main dependent variables, Compassion Fatigue and Burnout. Ten predictor variables were entered into each analysis, and these were made up of: Work locus of control, life spheres, intention to quit, employment setting, time, job title, education, age, gender, and income. Table 6 shows that a small but highly significant amount of variation in compassion fatigue (29.7%, $p < .01$) was accounted for by the regression analysis. The three variables that were significant in the prediction of compassion fatigue, in order of importance, were life spheres, intention to quit and time at work.

Life spheres was a notably large predictor of variance for compassion fatigue, adding 18.9% of the variance. Note that, time was a significant predictor in the regression equation, despite low Pearson correlation coefficient with compassion fatigue. However, time did have a number of correlations of varying magnitudes with other variables.

Table 6

Summary of Standard Multiple Regression Analysis for Variables Predicting Compassion Fatigue showing Beta, R-square, Adjusted R-square (Adj. R^2), Adjusted R-square change (Adj. R^2 change), and excluded variables for each predictor Variable.

	Predictors	Beta	R-square	Adj. R^2	Adj. R^2 change
Model 1					
Life spheres	.440	.194		.189	.194
Model 2					
Intention to quit	.523	.274		.264	.080
Model 3					
Time at work	.557	.311		.297	.037
Excluded Variables		Beta if incl.			
WLOC		.061			
Empl		.100			
Title		-.104			
Educ		.015			
Age		.018			
Gender		.132			
Income		-.075			

The regression was more successful in predicting the second dependent variable Burnout (see Table 7). Specifically, 50% of the variation in burnout was accounted for by the set of 10 predictor variables. The four variables that were significant in the prediction of burnout, in order of importance, were Life spheres, intention to quit, WLOC, and employment setting. Life spheres was a particularly large predictor of burnout, adding 39% of the variance. Note, that this variable was highly correlated with burnout in the correlation matrix also. Life spheres was a highly predictive variable in the compassion fatigue regression analysis as well.

Table 7

Summary of Standard Multiple Regression Analysis for Variables Predicting Burnout showing Beta, R-square, Adjusted R-square (Adj. R^2), Adjusted R-square change (Adj. R^2 change), and excluded variables for each predictor Variable.

	Predictors	Beta	R-square	Adj. R^2	Adj. R^2 change
Model 1					
Life spheres	.626	.392		.388	.392
Model 2					
Intention to quit	.683	.467		.460	.075
Model 3					
WLOC	.697	.486		.476	.019
Model4					
Employ	.709	.502		.489	.016

Excluded Variables	Beta if incl.
Empl	-.090
Title	.001
Educ	-.045
Age	.085
Gender	-.018
Income	.032

Analysis of Variance

The ANOVA for gender is shown in table 8. The total sum of squares is a measure of the total variation present in the data without regard to group. Within groups sum of squares is the measure of the within groups variation of individual scores, and between groups is the measure of variation of the sample means among groups. The hypothesis is that the populations or genders are the same for both compassion fatigue and burnout, that is: there will be no difference in the risk of developing CF and burnout between the genders.

It is clear that the obtained F = 7.281 in compassion fatigue falls beyond the critical value, so the hypothesis that the genders are the same is rejected. On the other hand the burnout F score of .176 falls within the critical range and therefore the hypothesis that the genders have equal scores for burnout is accepted.

Table 8

Summary of an Analysis of Variance for gender concerning both Compassion Fatigue and Burnout showing sums of squares (SS), Degrees of freedom (df), mean square (MS), F ratio (f), and significance (sig.).

		SS	df	MS	F	sig.
CF	b/w group	516.326	1	516.326	7.281	.008
	within gr.	11275.736	159	70.917		
Burnout	b/w group	13.539	1	13.549	.176	.675
	within gr.	12218.165	159	76.844		

The second ANOVA compared employment situation i.e. whether for a private practice or for a public agency. (See table 9). It was hypothesised that working situation would effect compassion fatigue and burnout scores. It is evident from table 9 that the hypothesis that work setting influences compassion fatigue can be accepted, as the F value falls beyond the critical value and is significant at .017. The same occurs for burnout as the obtained F values fall beyond the critical value and is significant at .001. Because the obtained value of F exceeds the critical value, it can be concluded that the population means differ and, therefore, that working situation influences burnout.

Table 9

Summary of an Analysis of Variance for employment concerning both Compassion Fatigue and Burnout showing sums of squares (SS), Degrees of freedom (df), mean square (MS), F ratio (f), and significance (sig.).

		SS	df	MS	F	sig.
CF	b/w group	740.785	3	246.928	3.508	.017
	within gr.	11051.277	157	70.390		
Burnout	b/w group	1226.984	3	408.995	5.835	.001
	within gr.	11004.730	157	70.094		

The populations intention to quit was also subjected to an ANOVA (see table 10). It was hypothesised that those who have an intention to quit will have a higher risk of developing compassion fatigue and burnout. Scores were categorised as from having 'no intention to quit' through to having a 'strong intention to quit' over the next 12 months. The .05 level of significance was used. The obtained F value fall beyond the critical value for both burnout and compassion fatigue with the significance being .000 for both. The hypothesis is thus accepted. It can be concluded that the population means differ, and therefore that there is a real difference among the five groups for both compassion fatigue and burnout.

Table 10

Summary of an Analysis of Variance for intention to quit concerning both Compassion Fatigue and Burnout showing sums of squares (SS), Degrees of freedom (df), mean square (MS), F ratio (f), and significance (sig.).

		SS	df	MS	F	sig.
Burnout	b/w group	2617.268	4	654.317	10.617	.000
	within gr.	9614.447	156	61.631		
CF	b/w group	1961.589	4	490.397	7.782	.000
	within gr.	9830.473	156	63.016		

Discussion

Findings of the Present Research

The Hypotheses

The first hypothesis was that public agency employees in the mental health field would be more at risk of developing compassion fatigue and burnout than those who worked as private psychologists. This hypothesis can be supported by the present research with results of the correlation matrix, multiple regression and ANOVA all indicating public workers were more at risk than private practice workers.

The second hypothesis was that those who had a high intention of quitting would have more risk of developing compassion fatigue and burnout. This was not supported by the present research with correlations showing that those who had high intentions of quitting had less risk of developing compassion fatigue and burnout. This was thought to be because of the feeling of control over one's job because the decision had been made to quit.

The third hypothesis was that psychologists who have an external work locus of control are at a higher risk of developing compassion fatigue and burnout than those individuals with an internal work locus of control. This was supported by the results of the present study. The correlations showed a significant positive correlation to both compassion fatigue and burnout. The multiple regression showed that for burnout work locus of control was a predictor though it was not a predictor for compassion fatigue.

The fourth hypothesis was that psychologists who have a low life satisfaction have a higher risk of developing compassion fatigue and burnout than those who have a high life satisfaction. This was supported by both the correlation and multiple regression for compassion fatigue and burnout.

The fifth hypothesis was that there would be no difference between male and female practitioners in the risk of developing compassion fatigue and burnout. This hypothesis was not supported fully. Women were more at risk of developing compassion fatigue than males, but not burnout.

The sixth hypothesis was that those who work full time will have a higher risk of developing compassion fatigue and burnout than those psychologists who work part time. This hypothesis was supported by the correlations and multiple regression for compassion fatigue, so those who work full time will have a higher risk of developing compassion fatigue than part timers, but are not at a higher risk of developing burnout.

Compassion Fatigue and Burnout

Compassion Fatigue

The information provided by the psychologists and professionals who responded to the present study showed that psychologists have a moderate risk of developing compassion fatigue. This figure is higher than previous research by Figley (1995) when the mean score for compassion fatigue was 28.78, in the present study the score is 34.75. This figure indicated that the participants in Figley's (1995) study had a low risk of developing compassion fatigue.

Those respondents in the present study who had a higher score on the compassion fatigue scale and were therefore more at risk often indicated in the qualitative section some clues as to why they were fatigued. One participant wrote about her experience as a police psychologist. She had a high risk of developing compassion fatigue and an indication that this could be somewhat caused by previous history of trauma was shown.

"I worked in a situation dealing with the death of a police officer.
I met the officers family and saw his body (his face was hardly recognisable).
I have since experienced flashbacks and had my first 'yuck' dream.
With thoughts of violence towards the perpetrator."

According to Rudolph et al. (1997) personal history is an important component of STS, and may certainly have had something to do with this participant's high CF score. Other respondents with high scores for compassion fatigue also wrote about experiences or work situations where they admitted to being 'run down', having low job satisfaction and that "clinical work over time is extremely toxic and has at times had a profound effect on my personal happiness".

Burnout

The average score for the burnout section of the compassion fatigue scale was 32.85 and this score falls into the high risk level of developing burnout (Figley, 1995). This is in line with another study by Rudolph et al. (1997) where over 50% of the participants in the study had a high risk of developing burnout. A study by Figley (1995) found that from a sample of 370 people there was an average burnout score of 24.18 which falls into the low risk of developing burnout. In another study by Figley (1995) in which lay mental health caregivers in rural Africa were tested for burnout an average score of 30 was found and this just meets the high risk for burnout level. Over 15 respondents in the study wrote about how they were previously burned out. Most of these individuals stated that they had left the field for a certain amount of time and had returned only because they had learned better coping strategies and gained more life experience.

" I would have previously answered this differently. At the end of my first year after graduating I was burned out and I took a 5 year break before returning. I now have more experience in life, personal knowledge and coping skills."

Several comments such as these indicate that preparation for these situations should be incorporated into academic training so that psychologists are more aware of coping strategies and where to get help from.

Descriptive Information

Demographic Information

Over 60% of the participants who responded to the questionnaire were women. There could be a variety of reasons for this. One reason could be that women were more willing to fill in the questionnaire than males, and perceived the issue as having greater importance for them. Another reason is that there are more women in this sample who were working in the field of psychology. At present in New Zealand there are 1182 females and 838 males on the Register of Psychologists

Another relevant piece of information gathered from the study was that the average age of the participants was 47. The amount of time they been in the field was not asked, but from the average age it could be assumed that most of the participants had had a number of years of working in direct contact with clients, and so they have experienced secondary trauma at some level during this time.

The present sample differed from much of the research in the area of compassion fatigue and burnout (e.g., Rudolph et al., 1997), in that it included only psychologists, and those who work in the field of psychology. Most other research includes participants from a variety of different fields including nurses, emergency workers, and crisis workers. In the present study, the majority were registered psychologists, clinical psychologists, and educational psychologists (over 80%). The other respondents worked in related disciplines as therapists, counsellors, lecturers and directors. From this range of professionals there is a firm base of psychologists, even those who listed themselves as therapists or counsellors would have a solid psychology background as all were on the mailing list of the New Zealand Psychological Society.

Work life

An important aspect to take into consideration was the amount of time spent in direct contact with clients. The research needed to include participants who had a high amount of contact with clients, and had somehow experienced the effects of trauma through their clients. For the present sample just over 50% of the time was spent in direct client service with over 20% spent doing paperwork and administrative duties. Other activities include supervision of others providing direct client service, and research.

Another aspect that was important in the development of compassion fatigue concerned the types of cases, and the percentage of time that was spent on these cases. Because not every type of case could be included in the questionnaire, and also because the types of cases can be multidimensional and include a variety of the listed cases, the 'other' category was the most highly used. The 'other' list included for example, cases such as special education, violent offenders, pain disorder. Other common reported cases included: depression, anxiety, relationships, conduct disorder/ADHD, adult and child sexual abuse, and PTSD cases. All of these cases could and do include an element of risk of developing compassion fatigue, as the trauma experienced by clients could be transferred with any disorder, especially PTSD, child and adult sexual abuse cases.

Almost 30% of the participants in the present study had an intention on some level to quit the field of psychology in the next 12 months. Approximately 5 participants were going to leave because of either retirement or maternity leave. The remainder gave their main reason for intending to quit as being inadequate professional support. This is highly relevant to the development of compassion fatigue as one way to prevent compassion fatigue is to have good supervision and consultation (Cerney, 1995). If inadequate professional support is a relevant and common reason for leaving the field of psychology then there must at some level be a lack of support and supervision for those working in direct contact with clients. This is especially relevant to those working in public agencies, where money and effort is spent on improving service to customers (e.g. flexibility of office hours for appointments, more rapid turnover time).

Unfortunately the effect of this may increase psychologists workload without making any provision for the need to provide support for the carers (i.e., psychologists). Often there are no team building or support type funds available. Often funds are only available for counselling under the EAP plan once the psychologist is burned out. By this time the psychologist may be in a position where the only way out is to quit. Often no preventative work may be done as management is under the assumption that psychologists, as mental health professionals, should be able to take care of themselves.

Scales and Sub-scales

The level of internality and externality were measured with the Work Locus of Control Scale in this study, as internals on average tend to perform better than externals, and have a higher job satisfaction because they benefit from the rewards of their better job performance. Internals are also less anxious, which will in turn increase job satisfaction, and therefore decrease the likelihood of developing compassion fatigue (Spector, 1997). The score for the Work Locus of Control Scale was reasonably low suggesting that the internality of the respondents in the present study is high. This indicates that the respondents should have a reasonable job satisfaction, and less risk of developing compassion fatigue.

When Work Locus of Control Scale (WLOCS) was further analysed it was found that it was significantly associated with or correlated with life satisfaction, where the more satisfied the respondent was with his or her life the more internal he or she was. WLOCS was also related to income, that is, the more income the respondent earned a year the more internal they were. This is possibly due to the fact that internals perform better at their jobs and therefore earn the rewards of salary increases, whereas externals are less likely to perform well at their jobs and not get salary increases. An alternative explanation could be that those on higher salaries were more in control. The WLOCS does not measure actual control in the workplace, but is a measure of control orientation and personal belief in the ability to experience control in work and other concepts.

The life spheres sub-scale that measures overall satisfaction with jobs, family life, and the future was found to be reasonably high, with an overall satisfaction level between 'somewhat satisfied' and 'mainly satisfied'. This is relevant to compassion fatigue and burnout as the more satisfied an individual is with both their professional and personal life the less likely they are to develop these problems. Feelings about one area of life affect feelings in other areas. It is possible that job satisfaction causes life satisfaction, or the reverse, or each type of satisfaction affects the other (Spector, 1997).

Life satisfaction was significantly related to the respondents' intention to quit. Those who had a low life satisfaction had a higher intention to quit. Life satisfaction was also significantly related to the working situation of the respondents and their age. Those working in private practice were more satisfied with their work than their public sector counterparts. This could be because of an increased self-efficacy, control over numbers of clients, and distribution of work load. However, as the questionnaire provides only correlational data, firm conclusions cannot be made regarding the nature of these relationships. These issues are worthy of more detailed, systematic study.

The relationship between age and life satisfaction was interesting, with older respondents feeling more satisfied with their lives. This could be for a variety of reasons including the fact that the older the respondent was the more likely they were to be working in private practice and only working part time. Both of these factors could dramatically affect both life satisfaction and the development of risk of compassion fatigue and burnout. Another reason could be that older professionals have more life experience and more effective coping strategies, such as a balanced lifestyle, to deal with the everyday trauma they are faced with in their jobs.

Qualitative Information

Some very interesting information and personal anecdotes came from the qualitative information section at the back of the questionnaires. Approximately 32 respondents chose to include personal observation and experiences, with a variety of information being shared about, for example: their previous experiences of compassion fatigue and burnout; problems with their working conditions; and the coping strategies they used to deal with problems in their working and personal lives. Ten respondents admitted to being previously burned out or of having compassion fatigue in the past. A few of these respondents left the field of psychology and returned only after having learned some coping strategies to deal with the stress they have to deal with both from their clients and their management system. After gaining more experience, personal knowledge, and learning coping skills the psychologists were more able to cope with traumatised clients.

> "At the end of my 1st year after graduating I was burnt out and took a 5 year break before returning. I cope because of experience in life, personal knowledge and learning new coping skills."

These coping strategies included learning safe practices and identifying early warning signs of distress. Regular supervision was mentioned several times, with an emphasis on balancing one's life and making compatible both a professional and personal life. Another coping strategy was to work part time rather than full time.

> "I work in an area of trauma and the effect on me is minimal because of: part time work; a good support team; and a busy and happy personal life."

Six respondents left the public system and started work in private practice to escape the management practices and politics that lead to feelings of distress and burnout.

> "I have left once and returned, going from public to private practice. It's the politics not the clients that lead to burnout."

Predicting Compassion Fatigue and Burnout

One of the main objectives of the present study was to develop a model capable of predicting the risk of developing compassion fatigue and burnout. Selected for this study were the following variables: work locus of control, life satisfaction, intention to quit, work setting (i.e., public or private sector), and whether they worked full or part time. Multiple linear regression was used to isolate predictors of variance in compassion fatigue and burnout from these variables.

The independent variables that were found to be the best predictors of compassion fatigue were life spheres, intention to quit and time spent at work.

Life Spheres

Life spheres was the largest predictor and accounted for 19% of the variance for compassion fatigue and had one of the highest significant correlations with compassion fatigue. The interpretation of this is that the individuals satisfaction with their life has a profound effect on whether they are at risk of developing compassion fatigue. Those individuals who were satisfied with their job, health, family relations, and life prospects were at less risk of developing compassion fatigue. The average for this scale showed that overall the participants were somewhat to mainly satisfied with their lives. Life satisfaction is an important aspect to compassion fatigue. Dutton & Rubinstein (1995) stated that general satisfaction or dissatisfaction with professional and personal life is a mediating factor to reactions to indirect exposure to traumatic events via their clients. These data suggest that work and non-work strategies for prevention must be pursued so as to increase life satisfaction and decrease the risk of developing compassion fatigue or burnout.

Intention to quit

The participants intention to quit was the second most predictive variable, and accounted for 8% of the variance in compassion fatigue. It also had a highly significant correlation. An interesting result was that the correlation was negative. This is unusual because it would seem that the higher risk the individual had of developing CF the more likely they are to want to quit.

An interpretation of this could be that the individual has been so fatigued and secondarily traumatised that they have decided to quit within the next twelve months. Once that decision has been made it is possible that their stress level decreases and they may be better able to cope with trauma. It could be that an 'intention to quit' provided those respondents with and opportunity to exercise control over their live and work. It gave them control and options that might not otherwise be there. This interpretation would also be consistent with the arguments presented to explain the role of locus of control. One participant of the present study wrote about how she had made the decision to quit her current job mainly because of the stress and subsequent health problems.

> "I have just recently resigned from my job because of stress and burnout.
> I have had health problems recently that I put down to this stress.
> I feel much better now and am much more positive about where my
> life is going now."

When the analysis of variance was done with intention to quit and compassion fatigue it was found that there was a real difference between the five groups on intention to quit (i.e., from no intention through to strong intention to quit) for compassion fatigue. Psychologists who had a strong intention to quit had a distinctly and significantly different score for compassion fatigue than psychologists who had either a moderate intention to quit or no intention of quitting.

Time Spent at Work

The final predictor of compassion fatigue was time spent at work, and this variable accounted for almost 4% of the variance in compassion fatigue. This also had a significant correlation and can be interpreted as the more time spent at work the higher the risk of developing compassion fatigue. The more time that is spent at work, on a full time basis, the more indirect exposure to traumatic events the caregiver will face. Those who work on a part time basis have a more balanced lifestyle and have time to pursue activities that are more positive and less conducive towards trauma and pain. This could also be related to life satisfaction. Part time work would provide more opportunity to engage in non-work activities and so increase life satisfaction.

Many of the participants in the study wrote in the qualitative section that they had previously been stressed and so had chosen to work part time rather than full time. As a result of this decision they claim that they are much happier and satisfied with both their professional and personal lives.

> "I have previously been stressed out after 14 years as a clinical psychologist. I have chosen to work part time now and feel much better. I actively encourage my colleagues to work part time as well."

With just 31% of the variance being accounted for by these three variables in compassion fatigue, it is apparent that there are other unmeasured variables that contribute to compassion fatigue. Further research in this area is required to determine what variables contribute more variance to compassion fatigue. Further research might investigate the respondents previous history of trauma and specific case loads.

Burnout

After a multiple linear regression was completed four variables were found to predict the variance in burnout. These variables were life spheres, intention to quit, WLOC, and work setting.

Life Spheres

Life spheres was the variable that was the best predictor of burnout and accounted for 39% of the variance. It also had a highly significant correlation with burnout. Life spheres was also the best predictor of compassion fatigue and so is an important variable when determining the risk of developing burnout and compassion fatigue.

Burnout occurs when the individual feels helpless and unwilling to deal with work, their satisfaction with their life both professionally and personally will therefore greatly influence their risk of burnout. Those individuals who are unsatisfied with their work content, work roles, interpersonal relations, and possibilities are more likely to feel that they have no control over their working situation. They feel that their efforts make no difference.

Workload is a large component of this and if the individual is overworked they can make no balance with more positive aspects such as family and friends to relieve some of the stress. One of the participants who had a particularly high risk of burnout wrote about her situation.

> "I'm tired and run down. I have too much administration and paper work to do and my caseload is too high. I can only do a really good job with few cases. I have low job satisfaction despite high effort. ALWAYS."

Intention to quit

Their intention to quit was the second highest predictor of burnout, and predicted 7.5% of the variance. It also had a significant negative correlation to burnout. An interpretation of this is that the higher the intention to quit their jobs the more control they feel they have over their lives. Once they have this control they no longer feel helpless and are able to refuse extra responsibility and feel less pressure to perform because they know they're leaving anyway. An ANOVA was done for the five groups of intention to quit (from no intention to quit to strong intention to quit) It was found that there was a real difference between these five groups for burnout.

Work Locus of Control

Work locus of control is defined as a general expectancy that rewards (i.e., pay rises, career advancement), or outcomes in life are either controlled by one's own action (internality) or by other forces (externality). WLOC had a highly significant correlation with burnout and was the third predictor of burnout in the multiple regression. WLOC predicted just under 2% of the variance in burnout. The positive correlation showed that the higher the persons score on the WLOC scale the higher their risk of developing burnout. A high score in the WLOCS indicates externality, where outcomes in life are thought to be caused by outside forces and not oneself. Alternatively low scores on the WLOCS indicates low risk of burnout.

Those individuals who thought that their professional lives were under their control and that their hard work was going to be rewarded because of the actions that they took were less likely to become burned out. Internals also tend to be more satisfied with their jobs than externals, report less role stress, perceive more control and autonomy and enjoy longer job tenure. This indicates that WLOC is related also to life spheres and intention to quit.

Work Setting

The variable of employment situation was separated into four categories. Private practice = 1, not for profit agency = 2, public agency = 3, for profit agency = 4. It was found that this variable was positively and significantly correlated to burnout and was also a predictor of burnout, predicting 1.6% of the variance. The positive correlation showed that the higher the level of employment the more likely the individual is to develop burnout. This meant that private practice was one of the safest environments and the for profit and public agencies were the working situations that increased the risk of burnout.

Many participants who worked for public agencies wrote about their experiences at work, especially concerning bureaucracy, management, and paperwork. This is a quote from a full time public agency worker who has a high intention of quitting.

"It would be a good idea to sell/disband/obliterate the public agency I work for. Management strategies reduce and undermine professional service delivery and increase spending on administration, politics and self indulgent gravy train robbers".

Alternatively a full time private clinical psychologist wrote:
" I have left once and returned from public to private practice. It's much better now. It's the politics not the clients that lead to burnout".

An ANOVA was done on the employment situation variable and it was found that there was a significantly real difference between the four working situations for burnout.

Although 39% of the variance was predicted by life satisfaction, only 11% was predicted by the other 3 variables. This suggests that there are other unmeasured variables that contribute to the experience of burnout.

Gender

An interesting result that emerged from the analysis of variance was that there was a difference between males and females in compassion fatigue scores. The compassion fatigue significance level between males and females .008 in the ANOVA, while for burnout the significance level was much higher at .675. This indicated that there was no difference between males and females on burnout risk scores, but there was a difference between males and females for the risk of developing compassion fatigue. There was also a positively significant correlation between gender and compassion fatigue. Males beings scored as 1 and females as 2 indicated that females were at a higher risk of developing compassion fatigue. The gender difference could be an important factor when trying to prevent compassion fatigue as females could be more at risk and this should be addressed when assessing prevention methods.

Relationships among Variables and Measures

As respondents' life satisfaction decreased so their risk of developing compassion fatigue and burnout increased. As individual dissatisfaction with his/her professional and personal life increases, the associated decline in emotional well being is likely to result in increased vulnerability to secondary traumatisation via interaction with client problems and experiences. Coping systems may be rendered less effective, particularly in the absence of external support, by the unexpected nature of reactions in psychologists who expect emotional invulnerability. Life satisfaction was positively correlated with intention to quit. The more dissatisfied the individual was with their life the greater was their intention of quitting. Life satisfaction was also related to job situation (e.g. Private vs. public).

If the respondent worked for the public sector there was a tendency to be much less satisfied with their professional and personal lives. Life satisfaction was negatively correlated with WLOC, so the higher the individuals life satisfaction, the more internal they were. WLOC was positively related to compassion fatigue and burnout, suggesting that the more internal the respondent the less risk they have of developing these problems.

The relationship between the respondents intention to quit is inversely correlated to compassion fatigue and burnout. As the respondents' intention to quit increased their risk of developing compassion fatigue and burnout decreased. This was an unexpected and interesting result and can be interpreted in a number of ways. The assumption was that high compassion fatigue or burnout is instrumental in prompting the intention to quit. It could be that the individual who has an intention of quitting finally feels that they have some sense of control of their professional and private lives. They feel that they don't have to take on so much responsibility and that they no longer have the pressure to perform flawlessly, thus reducing their anxiety.

Another explanation could be that because they know they are leaving or have an intention of quitting they feel a sense of apathy and don't feel as if they have to work so hard to get results, thus decreasing burnout and compassion fatigue symptoms. Intention to quit was also related to employment situations. If the respondent was in the public sector they had more of an intention of quitting than someone who was in the private sector.

The employment situation was positively related to both compassion fatigue and burnout. If a participant was working in the public sector they were more likely to develop burnout and compassion fatigue than someone who was working in the private sector. This supports the hypothesis set out at the beginning of this study that public sector workers were more at risk than private practice workers. This can be explained in a variety of ways. One explanation is that those who work in the public sector have less control over their working conditions and the clients numbers and type that are seen. Public agency workers also have exposure to environmental/political constraints in their work/conditions. Public sector workers may have a higher percentage of clients who have had traumatic experiences than private practice workers.

Public sector workers have more interactions with management, funding issues and problems, and politics, all which seem to have a negative effect on job satisfaction. The cost cutting schemes that are under way in the public system currently increase paperwork, administrative duties and workloads, but at the same time eliminate support systems such as supervision. Supervision is an essential mediator in compassion fatigue and burnout and ultimately increases the quality, and decreases the cost of care (Rudolph et al., 1997).

The employment situation was also related to age. As the participant becomes older the more likely he or she is to be working in the private sector, workers are also more likely to be working part time rather than full time. Older professionals also had more satisfaction with their personal and professional lives and this is most probably related to working in private practice and working part time, as well as having a more balanced lifestyle.

Time spent at work was related to compassion fatigue only. If the individual was working part time they had less of a risk of developing compassion fatigue than those working full time. This can be explained as when the professional is working full time they have more exposure to clients with traumatisation just because they are at work more and face more clients. They are also more likely to carry a heavy administrative load. Full time workers also have less of a chance to balance their lifestyle with more enjoyable activities while they're not at work.

Levels of compassion fatigue was influenced by gender; females being at a higher risk of developing compassion fatigue than males, but not burn out. There is no obvious reason for this, particularly as they were more likely to work part time rather than full time. They were as a whole younger than the male participants, and this may have had an influence as older professionals were less at risk as a consequence of having had more time to develop coping strategies and to be more immersed in the administration system etc.. Females may be more likely to identify with their clients as a higher percentage of females are seen in psychiatric hospital settings than males.

Also some areas of trauma e.g. Sexual abuse and child abuse are more closely linked to females self identity than males. Females possibly have fewer mechanisms for distancing themselves than males. Another possible explanation could be that females have a greater willingness to disclose emotions, therefore higher scores were reported but this did not necessarily indicate greater risk literature has made any claims about females being more at risk than males so no other explanations can be offered at this stage without further analysis.

Prevention of Compassion Fatigue

Cerney (1995) reports that there are various ways of using preventative measures for trauma therapists when they are working with traumatic case loads. The first measure she indicated was 'Therapeutic Realism'. This concept is simplistically the therapist not allowing themselves to feel that they must be able to treat every kind of patient, regardless of diagnosis, or to handle an unlimited number of patients. The irrational belief that some therapists hold that they must operate at peak efficiency at all times with patients can and does contribute to secondary trauma development.

There are not enough therapists skilled enough to work with PTSD victims, and because of this the therapists that do work in this area are swamped with referrals. Consequently they may not only be traumatised by the content of their clients traumatic experiences, but also by their inability to serve all those who need their help.

Another measure designed by Cerney (1995) is that of 'Supervision - Consultation'. Cerney (1995) claims that much secondary trauma can be avoided if therapists seek regular supervision or consultation. Within supervision, overidentification can be corrected, alternative treatment procedures discussed and evaluated, and the therapists overextension or overinvolvement analysed and understood.

'Group supervision' can also be very helpful when working with trauma victims, as group members can listen to how others are handling cases and may gain insight into their own cases.

Viewing another therapist's patient and listening to how another therapist is handling material can be helpful as this allows therapist to view their own therapy as others might view it (Cerney, 1995). Social support has been shown to be an effective moderator of both general stress (Cobb, 1976) and traumatic stress (Flannery, 1990).

McCann & Pearlman (1990, cited in Cerney, 1995), emphasised the importance of case supervision as a way of dealing with affect overload and the intrusive imagery that can disrupt the therapist's life.

'Establishing a Balance' is another measure advocates Cerney (1995). Therapists should establish and maintain a balance between their professional and personal lives. Frequently overworked and overtraumatised themselves, these therapists may traumatise their families by their unavailiability and emotional withdrawal. Maintaining a rewarding personal life enables therapist to have fun, enjoy themselves and renew their faith in the goodness of most humans.

Maintaining Physical and Mental Health is the last measure given by Cerney (1995) as listening to others is strenuous work that requires stamina. Staying healthy requires both regular exercise and play, a balanced diet and sufficient rest (Welch, Medeiros, & Tate, 1982).

Prevention of STS can be placed into a multidimensional framework with primary prevention, secondary prevention and tertiary prevention. Primary prevention involves long-term social and societal changes and therefore the elimination of root causes of interpersonal violence. Primary prevention leads on to secondary prevention and this involves personal and environmental planning and strategies and then preparation for coping with the impact of STS. Organisations could help to implement and sustain preventative strategies such as training, management skills etc. Secondary prevention then leads on to tertiary prevention and this involves crisis intervention for individuals or communities and then reduction of long-term effects of STS (Yassen, 1995).

Contributions of the Present Research

The present research contributes both to the literature on compassion fatigue and burnout, and to the information available to psychologists and organisations both in the public and private sectors. It highlights life satisfaction, work locus of control, intention to quit, time spent at work, and work settings as areas that appear to influence the development of compassion fatigue and burnout. It also highlights the relevance of this area of research to women.

Contributions to the Literature

The findings of the present research, that life satisfaction and work locus of control impact on the development of CF and burnout, contribute to the literature in this area (Rudolph et al., 1997; Farber & Heifetz, 1982; Hellman et al., 1986; Raquepaw & Miller, 1989). The inclusion in the present study of both burnout and compassion fatigue contributes to the literature in the area, as there is very little literature research on compassion fatigue.

The findings regarding the relationship between the intention to quit the field, and work setting has added to the literature of Raquepaw & Miller (1989), who also found that those professionals who worked for agencies had more symptoms of burnout than did colleagues who worked solely for private practice. The difference between the present research and Raquepaw & Miller's research was that compassion fatigue was also measured and was found to be influenced by the work setting. Professionals had a higher risk of developing compassion fatigue and burnout if they worked in a public agency rather than a private practice.

In addition Raquepaw & Miller (1989) also reported that burnout was predictive of the therapist's reported intentions to leave the profession for other occupations. What the present research found contradicts this report. The present study's finding was that those individuals who had a reported intention of leaving the field of psychology, had a lower risk of developing both compassion fatigue and burnout. A difference between the current study and Raquepaw & Millers' (1989) study is that for the current study the sample was made up of only psychologists, whereas the Raquepaw & Miller (1989) study used psychotherapists.

The present study had conflicting evidence to the literature on the effect on life spheres. Life spheres was a dominant predictor for the risk of developing both compassion fatigue and burnout. Rudolph et al. (1997) found no significant interaction with life spheres and either burnout or compassion fatigue. Rudolph et al. (1997) also found that there was a main effect of training level for both compassion fatigue and burnout. It was found with their study that masters students were at a higher risk for developing compassion fatigue and burnout than the group as a whole. Conversely, bachelor level providers were at a significantly lower risk of developing compassion fatigue and burnout as a whole. In the present study there was no main effect for education on either compassion fatigue or burnout.

The present research also contributed to the literature with the finding that female professionals in the field of psychology were more likely to develop compassion fatigue than their male colleagues. However, females were not more at risk of developing burnout than males.

Although the present research does not clarify specifically what causes burnout and compassion fatigue it does give some strong predictive factors that may influence their development. Raquepaw & Miller (1989) speculated in their study that the source of burnout lies in social or situational factors, rather than in the people who experience burnout.

The present research can partly verify this statement from the qualitative information given by the participants. Most of the participants who wrote in the qualitative section about being previously burned out or presently burned out or under stress claimed that it was the management, politics and bureaucracy that caused these stresses rather than the clients or psychologists themselves.

Another important contribution to the literature in this area concerned the fact that those professionals who worked part time had less risk of developing compassion fatigue and burnout than those professionals who work full time. It seems that less contact time with clients, and the ability to undertake other activities, mediates the traumatic experiences heard during work. Future research will be required to determine which of these (less contact/other activities) is most important here, or whether it is a mix of both. This has wider implications as organisations can use strategies to achieve the goal that staff attend to accomplish through part time work.

The present findings have important implications for future research and highlight the importance of including both burnout and compassion fatigue in literature about the stresses of psychological work.

Contributions to Mental Health Organisations

All mental health agencies and psychological private practices should hopefully be interested in the present findings. The present findings can be used to increase the knowledge and understanding about the risks of compassion fatigue and burnout and so decrease them through the implementation of preventative measures.

The most significant finding of the present study was the number and intensity of those professionals who are at risk of developing compassion fatigue and burnout. With a high risk of developing both compassion fatigue and burnout it seems that there is a problem facing mental health in New Zealand.

One of the main areas of concern or interest was the finding that those professionals who worked in public agencies were at higher risk of developing compassion fatigue and burnout than those who worked in private practice. Organisations particularly in the public sector need to be at least aware of this and hopefully implement changes so that preventative measures such as support systems can be implemented.

Another area of concern for mental health organisations is the finding of the present research that females are at a higher risk of developing compassion fatigue than their male colleagues. Future research needs to address this to clarify why there is a difference between the genders, especially considering the fact that there are more females than males in the present mental health workforce..

Future Research

Given the present findings regarding the degree of both burnout and compassion fatigue in New Zealand mental health professionals, future studies should continue to examine the effect that both of these disorders have on both the professional and the client. Future research should look into the difference between female and male professionals and their risk of developing compassion fatigue

The present research has only touched on some of the more important variables that may influence the development of compassion fatigue and burnout. Future research needs to identify more distinctly which variables contribute to development of compassion fatigue and burnout.

A more pressing issue however, may be finding preventative measures that can inhibit the development of compassion fatigue and burnout before it even starts. These prevention methods could be taught to students in graduate school, alerting them to the signs of compassion fatigue and burnout, and to help them develop coping skills to deal with problems that may put them at risk.

Research into the effectiveness of support systems for professionals, both supervisory support and colleague support would be beneficial, so that worries, stresses, and problems can be addressed and talked over, rather than taken home.

The present study indicates that compassion fatigue and burnout scores may vary over time. In order to teach graduates preventative measures it is important to identify which risk factors are critical at what stage in their career. A longitudinal study would be the most effective research design so that compassion fatigue and burnout scores are examined in graduates just starting out with their first cases, following them throughout their career and ending the study only when they leave the field of psychology.

Limitations of the Present Research

When considering the present findings, the associated limitations must also be considered. Firstly, there were only 161 respondents who returned a fully completed questionnaire. As a result of the small number of professionals involved in the research, caution must be taken when generalising the results to professionals outside the immediate sample.

Another limitation of the present research was that there were a variety of different types of psychologists, and different types of cases taken on. Because of this the results cannot be generalised to just clinical psychologists or educational psychologists, or just psychologist working with trauma victims.. An optimal sample would have included just clinical psychologists whose main caseload was PTSD disorders, and high trauma cases (i.e., sexual offenders, sexual abuse cases, violent offenders). Due to time and resource constraints it was impossible to differentiate this sample from the general population of psychologist and mental health workers.

The present research should be seen as a starting point in evaluating the risk of developing compassion fatigue and burnout. Due to the practical limitations of the present research, such as severe time and resource constraints, a questionnaire was the only method of data collection used. A more in depth investigation, better addressing the complexity of compassion fatigue and burnout risk variables, might have included a series of focus groups prior to developing the questionnaire. This would have been particularly important given the need to gain a better understanding of organisational factors and management practices

The use of focus groups, involving perhaps 8 to 10 individuals from the mental health field, would have highlighted the issues most pertinent to these groups, and allowed for greater accuracy and relevance in the development of questionnaire items, as well as providing much rich qualitative detail. The generalisability of the information provided by the focus groups to other individuals within the organisations could then have been tested using the questionnaire methodology. The use of focus groups may also have contributed to a greater understanding of the differences between the present and previous findings. It is suggested that future research incorporates a method such as this to gain greater depth of understanding in this area.

The scales used in the present research were developed overseas and had not been tested on New Zealand samples. They seem to have been successfully applied to the current sample. The Compassion Fatigue Scale (Figley 1995) had questions that were used to measure both compassion fatigue and burnout. At first an analysis was done using burnout as an independent variable. However, the high correlation between burnout and compassion fatigue raised the possibility of it contaminating other variables possibly masking the influence of other compassion fatigue risk. Consequently, compassion fatigue and burnout were treated as separate independent variables.

If this had been known prior to the questionnaires being developed perhaps different measures would have been used to test for risks of both compassion fatigue and burnout, not just compassion fatigue. Compassion fatigue is thus a distinct construct that may be implicated in the development of burnout. At present , this conclusion remains tentative. Further work is required to decide the nature of these constructs and the relationship between them.

It would be interesting in future research to use different measures and scales. Perhaps using the WLOCS was not as useful as other scales could have been, but more research needs to be done in this area to determine exactly what variables need to be measured to best determine the risk of developing compassion fatigue and burnout.

Conclusions

The present research makes a number of valuable contributions to the literature on compassion fatigue and burnout. The main finding of the research was that New Zealand psychologists have a high risk of developing both compassion fatigue and burnout. The present findings indicate that those who work full time in public agencies are more likely to develop compassion fatigue and burnout than those who work part time in private practice. Yet, females in either setting are more likely to develop compassion fatigue than their male colleagues.

The professionals intention to quit was negatively related to compassion fatigue and burnout, with those who reported an intention to quit the field of psychology having a low risk of developing compassion fatigue and burnout.

Life satisfaction was also negatively related to compassion fatigue and burnout with those who were more satisfied with their family life, jobs, and future expectations being at a lower risk than those who were unsatisfied.

The individuals work locus of control also indicated that the more internal the professional was the more satisfied they were with their lives, and consequently had a lower risk of developing compassion fatigue and burnout than those who were external.

APPENDIX A

Information Sheet

A study of how both individual and organisational factors combine to produce important risk and protective factors for developing secondary traumatic stress disorder of psychologists.

INFORMATION SHEET FOR PARTICIPANTS

My name is Sharon Tomkins and I am completing a master of Arts in psychology at Massey University. My supervisors are Cheryl Woolley who is a senior clinical psychologist, and Doug Paton who is an associate professor and psychologist both based in the School of Psychology at Massey University.

The reason for undertaking research into secondary traumatic stress disorder in psychologists is because there seems to be an increase in psychologists leaving the field of psychology because of increased stress and burnout. This study will investigate how prevalent secondary traumatic stress disorder is both in the public and private sectors, who is most at risk for developing secondary traumatic stress, and whether the amount and/or nature of client caseloads affects the development of secondary traumatic stress. The study will generally be looking at what psychologists do every day.

To do this, I require the help of psychologists in data collection. I am inviting all registered psychologists in New Zealand to take part in this study. I have used publicly available information such as the lists held by the College of Clinical Psychology, New Zealand Psychological Society and the Psychologists Board, to contact you and invite you to participate in the study.

This study will involve you completing the attached questionnaires and mailing them to me in the envelope provided. Completing the questionnaires will take about 45-60 minutes.

- Your participation is voluntary and you may decline to participate.
- You may withdraw from the study at any time

- You can refuse to answer any particular questions at any time.
- You may ask any questions about the study at any time during participation.
- You can provide information on the understanding that your name will not be used unless you give permission to the researcher.
- You will be given access to a summary of the findings of the study when it is concluded

Please feel free to contact me if you have any questions or queries. You can leave a message for me at the psychology department (ph (06) 350 4118). Cheryl Woolley can be contacted on (ph (06) 350 2076), and Doug Paton on (ph (06) 350 2064).

Kind Regards

Sharon Tomkins
Researcher

APPENDIX B

Questionnaire

A. Demographic Information *(please circle option or reply as necessary)*

1. Gender: Male/Female

2. Age: ____

3. Ethnic Group:
   New Zealand/European
   European
   Maori
   Pacific Island
   Asian
   Other: please state_____

4. Marital Status:
   Married
   Divorced
   Single
   Live-in
   Widow

5. Annual Income:
   Below $30K
   $30 - $45
   $45 - $60
   $60 - $75
   $75 - $90
   $90 - $120
   $120 - $150
   $150 & up

B. Work Details *(please circle or reply as necessary)*

6. State your highest educational qualification _____

7. What is your current job title? _____

8. Do you work: Part time Full time

9. Which of the following best describes your primary employment?
   a) private practice
   b) not-for-profit agency
   c) public agency
   d) for-profit agency

10. What percentage of your total professional time is spent on each of the following activities? *(The total amount of time should add to 100%)*

% Time	Activity
/_/_/	direct service (face-to-face contact with clients)
/_/_/	indirect client service (e.g. paperwork, consultants collateral contact)
/_/_/	supervision of others providing direct client service
/_/_/	administration of programmes or agencies
/_/_/	research
/_/_/	teaching
/_/_/	other,including_____

11. How are cases referred to you for assessment and treatment? (circle all that apply)
    a) self referrals
    b) CYPS
    c) CAFS
    d) medical profession
    e) schools
    f) ACC
    g) EAP
    h) other_____

12. What percentage of the time do you spend working on the following types of cases?

% time	Cases
/_/_/	anxiety disorders
/_/_/	child and adolescent anxiety disorders
/_/_/	depression disorders
/_/_/	adult sexual abuse cases
/_/_/	child sexual abuse cases
/_/_/	physical abuse
/_/_/	psychological abuse cases
/_/_/	sex offenders
/_/_/	child abuse and neglect
/_/_/	conduct disorder/ADHD
/_/_/	PTSD disorders
/_/_/	victims of violence
/_/_/	relationship cases
/_/_/	drug and alcohol abuse
/_/_/	psychotic disorders
/_/_/	others, including _____

Any additional comments about the nature of your work _____

_____

_____

C. Professional Satisfaction

13. How much flexibility do you have in choosing which cases you want to work with? *(Please circle the appropriate point on the scale below)*

No Flexibility				**Complete Flexibility**
1	**2**	**3**	**4**	**5**

14. Have you any intention of quitting the field of psychology in the next twelve months? *(Please circle the appropriate point on the scale below)*

Strong Intention				**No Intention**
1	**2**	**3**	**4**	**5**

If so give reason:

a) inadequate remuneration
b) inadequate professional support
c) dislike for the work
d) non-work related reason
e) other _____

Consider each of the following statements about work. Write in the number for the best response, in the space provided. Use one of the following answers.

1	**2**	**3**	**4**	**5**	**6**
disagree very much	**disagree moderately**	**disagree slightly**	**agree slightly**	**agree moderately**	**agree very much**

Answer all items.

1. ___ A job is what you make of it.
2. ___ On most jobs, people can pretty much accomplish whatever they set out to accomplish.
3. ___ If you know what you want out of a job, you can find a job that gives it to you.
4. ___ If employees are unhappy with a decision made by their boss, they should do something about it.
5. ___ Getting the job you want is mostly a matter of luck.
6. ___ Being successful is primarily a matter of good fortune.
7. ___ Most people are capable of doing their jobs well if they make the effort.
8. ___ In order to get a really good job you need to have family members or friends in high places.
9. ___ Promotions are usually a matter of good fortune.
10. ___ When it comes to landing a really good job, who you know is more important than what you know.
11. ___ Promotions are given to employees who perform well on the job.
12. ___ To be successful you have to know the right people.
13. ___ It takes a lot of luck to be an outstanding employee on most jobs.
14. ___ People who perform their jobs will generally get rewarded for it.
15. ___ Most employees have more influence on their supervision than they think they do.
16. ___ The main difference between people who are successful and those who are not is luck.

Below is a list of life spheres which can influence your psychological state. Please rate how satisfied you are with these spheres. Use the 5-score scale below.

1	2	3	4	5
completely satisfied	**unsatisfied**	**somewhat satisfied**	**mainly satisfied**	**completely satisfied**

Life Spheres

1. ___ Your job (work content, work role, interpersonal relations, possibilities etc.)
2. ___ Relations in your family
3. ___ Your children: their health and well-being
4. ___ Nutrition
5. ___ Rest and relaxation
6. ___ Your material well-being
7. ___ Communication/interaction with friends
8. ___ Your social status
9. ___ Life prospect, future expectations
10. ___ Intimate relations/sexual satisfaction
11. ___ Hobbies, creativity, self-expression
12. ___ Your health

Consider each of the following characteristics about your *current* situation. Write in the number for the best response. Use on of the following answers

1	2	3	4	5
Rarely/Never	**At Times**	**Not Sure**	**Often**	**Very Often**

Answer all items, even if not applicable.

Items about you:

1. ___ I force myself to avoid certain thoughts or feelings that remind me of a frightening experience.
2. ___ I find myself avoiding certain activities or situations because they remind me of a frightening experience
3. ___ I have gaps in my memory about frightening events.
4. ___ I feel estranged from others.
5. ___ I have difficulty falling or staying asleep.
6. ___ I have outbursts of anger or irritability with little provocation.
7. ___ I startle easily.
8. ___ While working with a victim I thought about violence against the perpetrator.
9. ___ I am a sensitive person.
10. ___ I have had flashbacks connected to my patients and their families
11. ___ I have had firsthand experience with traumatic events in my adult life.
12. ___ I have had firsthand experience with traumatic events in my childhood.
13. ___ I have thought that I need to "work through" a traumatic experience in my life.
14. ___ I have thought that I need more close friends.
15. ___ I have thought that there is no one to talk with about highly stressful experiences.
16. ___ I have concluded that I work too hard for my own good.

Items about Your Patients and Their Families:

17. ___ I am frightened of things a patient and their family has said or done to me.
18. ___ I experience troubling dreams similar to a patient of mine and their family
19. ___ I have experienced intrusive thoughts of sessions with especially difficult patients and their families.
20. ___ I have suddenly and involuntarily recalled a frightening experience while working with a patient and their family.
21. ___ I am preoccupied with more than one patient and their family.
22. ___ I am losing sleep over a patient and their family's traumatic experiences.
23. ___ I have thought that I might have been "infected" by the traumatic stress of my patients and their families.
24. ___ I remind myself to be less concerned about the well-being of my patients and their families.
25. ___ I have felt trapped by my work as a practitioner.
26. ___ I have a sense of hopelessness associated with working with patients with certain families.
27. ___ I have felt "on edge" about various things and I attribute this to working with certain patients and their families.
28. ___ I have wished that I could avoid working with some patients and their families.
29. ___ I have been in danger working with some patients and their families.
30. ___ I have felt that some of my patients and their families dislike me personally.

Items about Being a Practitioner and Your Work Environment:

31. ___ I have felt weak, tired, run-down as a result of my work as a practitioner.
32. ___ I have felt depressed as a result of my work as a practitioner.
33. ___ I am unsuccessful at separating work from personal life.
34. ___ I felt little compassion toward most of my co-workers.
35. ___ I feel I am working more for the money than for personal fulfilment.
36. ___ I find it difficult separating my personal life from my work life.
37. ___ I have a sense of worthlessness/disillusionment/resentment associated with my work.
38. ___ I have thoughts that I am a "failure" as a practitioner.
39. ___ I have thoughts that I am not succeeding at achieving my life goals.
40. ___ I have to deal with bureaucratic, unimportant tasks in my work life.

If you have any additional comments related to anything about the questionnaire please write them here...

Thank you for taking the time to complete these questionnaires. Please return them in the Freepost envelope provided.

If you would like me to advise you of the findings of the survey when the data analysis is complete, please fill out the form below and post to me separately.

Sharon Tomkins
C/- School of Psychology
Massey University
Private Bag 11 222
Palmerston North

.....

Please send me the findings of the survey on Secondary Traumatic Stress of Psychologists.

Name: .....

Address: .....

.....

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