

**PSYCHOLOGICAL EFFECTS OF PROFESSIONAL EXPOSURE TO TRAUMA  
AND HUMAN SUFFERING: SYSTEMATIC REVIEW AND META-ANALYSIS**

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**Abstract**

Over the past decades a growing interest has emerged toward understanding the impact that the exposure to human suffering produces in mental health professionals, leading to the identification of three constructs: vicarious traumatization (VT), compassion fatigue (CF), and secondary trauma (ST). However, little is known about how these conditions affect psychologists. A systematic review and a meta-analysis were conducted to examine the evidence about the effects of occupational exposure to trauma and suffering in studies that included psychologists among their samples. Fifty-two studies were included comprising 10,233 participants. Overall, the results showed that most professionals did not experience relevant distress due to their work, yet some of them developed clinically significant symptoms (i.e., PTSD). However, solid conclusions could not be drawn due to the numerous methodological difficulties found in this research field (i.e., group heterogeneity, lack of comparison groups, and conceptual overlap). Thus, it is necessary to further investigate this topic with scientific rigor to understand these stressors and develop evidence-based interventions.

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*Keywords:* secondary trauma, compassion fatigue, vicarious trauma, psychologist, meta-analysis

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## Introduction

Providing psychological services can be a rewarding experience, with benefits such as personal satisfaction (Linley & Joseph, 2007), professional growth (Măirean, 2016; Rhee et al., 2013) and the feeling of having a positive impact in the world (Stamm, 2002). However, over the past decades a growing interest has emerged toward the effects that the exposure to human suffering produces on professionals (Moran & Asquith, 2020; Sweileh, 2020), leading to the identification of three constructs: vicarious traumatization, compassion fatigue, and secondary traumatic stress.

Vicarious traumatization (VT) refers to the changes in the professionals' belief system resulting from being repeatedly exposed to the trauma narratives of their clients (Pearlman & Saakvitne, 1995). This construct is theoretically rooted in the Constructivist self-development theory (CDST; Saakvitne et al., 1998). This framework asserts that people's understanding of the world depends on cognitive structures named schemas, which are developed by experience (McCann & Pearlman, 1992). Although schemas are assumed to be stable during life, direct or indirect exposure to traumatic events can disrupt them. Professionals exposed to narratives of suffering may experience alterations in their schemas and frames of reference (Janoff-Bulman & McPherson, 1997). Although previous studies have reported that the impact of VT hinges upon the interaction of multiple variables (i.e. professionals' personal characteristics, work setting, therapeutic relationship), literature suggests that certain risk factors may increase the vulnerability to VT, including: working with traumatized individuals for long periods of time, being exposed to graphic details, having experienced traumatic events, and the lack of specific education or training (Hensel et al., 2015). Among the negative consequences of VT are distrust, helplessness, cynicism, hopelessness (Reyes et al., 2008), numbness (Van Minnen & Keijsers, 2000), and the overprotection of loved ones (Brady et al., 2019).

In addition to these cognitive changes, it has been documented that indirect exposure to suffering or traumatic experiences can produce analogous thoughts, emotions, and reactions to those experienced by primary traumatized individuals (Figley et al., 2017). This phenomenon was stated by Figley (1995), who coined the term “secondary traumatic stress” or secondary trauma (ST) to describe the Posttraumatic Stress Symptoms (hereafter PTSS), namely intrusion, avoidance, and arousal, experienced by professionals in response to their clients’ narratives. ST has been associated with significant impairment in professionals working with trauma victims due to its invasiveness in daily life. For example, referring to intrusion symptoms, one therapist related “I woke up every night for a week after discovering a client’s abuse as a child (...). The thought wouldn’t linger, it would just be the vivid picture that woke me up all agitated so that I couldn’t fall back to sleep” (Fahy, 2007; p. 202). As for arousal, another therapist stated “I am hypervigilant in certain situations. For instance, when I’m walking in a forest and I see a stranger coming towards me, I’m more conscious of danger, more alert and cautious than I ever was before” (Van Minnen & Keijsers, 2000, p. 193). Although ST has been discussed in previous studies about the treatment of survivors of traumatic events such as the Holocaust (Danieli, 1988), Vietnam (Figley, 2002) or 9/11 (Woodward et al., 2005), it was not until the publication of the DSM-5 that the professional’s indirect exposure to trauma content was recognized as a qualifying situation for PTSD diagnosis through criterion A (Mordeno et al., 2017).

Finally, compassion fatigue (CF) is the newest concept in the literature on the cost of caring. CF has been conceived both as a unique construct and as a synonym of ST and VT. Considered as a singular phenomenon, as initially described by Joinson (1992), it accounts for the reduction of the professional capacities resulting from their exposure to suffering. Its symptoms include tiredness, emotional drainage, and feelings of being trapped and isolated (Najjar et al., 2009). Joinson proposed CF to be a form of burnout specific to the helping

professions, despite no empirical evidence of this hypothesis being provided. Later, Figley (1995, p. 253), defined this construct as “a state of exhaustion and dysfunction biologically, psychologically, and socially as a result of prolonged exposure to compassion stress and all it invokes.” In fact, this author considered CF as “a more user-friendly term for secondary traumatic stress disorder, which is nearly identical to PTSD, except that it implies to those emotionally affected by the trauma of others” (Figley, 2002, p. 3). Regardless this theoretical confrontation, it is now accepted that CF is a unique response to work-related exposure to suffering and trauma, defined as an emerging gradually estate of emotional exhaustion (Figley, 2002). Despite its similarity with burnout, CF appears abruptly while burnout is more insidious and accumulative (Dafos, 2005). The consequences of CF include physical responses (e.g., exhaustion, somatization, sleep disturbances), deadaptative coping strategies (e.g., substance abuse), depersonalization, and professional impairment (Bercier, 2013; Sinclair et al., 2017).

It is important to note that helping professionals may experience other negative outcomes stemming from their practice, including emotional distress (i.e., anxiety, depression), and burnout. However, these consequences are not deemed of interest in this study because of their generalist nature, meaning that they can appear in any professional context, whereas VT and ST have been described as exclusive responses to work with traumatized individuals. As for CF, it is a work-related condition that is associated with helping professions; thus, it may also be present in trauma-related work.

Although VT, ST, and CF are commonly reported in healthcare settings, research on these conditions is fraught with methodological and conceptual flaws, including terminological overlap (Branson, 2019; Elwood et al., 2011), the interchangeable use of constructs (Sprang et al., 2019; Taylor & Furlonger, 2011), and the lack of comparison

groups (Kadambi & Ennis, 2004) that have affected their study, leading to inconsistent and even contradictory findings (Sabin-Farrell & Turpin, 2003; Sexton, 1999).

VT, ST, and CF have been documented in different professional groups (e.g., first responders, law enforcement, interpreters, clergy), although the field which has attracted the most attention is mental health. Generically known as “mental health professionals,” this group comprises several disciplines (e.g., psychiatry, education, psychology, social work) that have their own specific methods and approaches to the study of psychological phenomena (González & Valdez Medina, 2005). Thus, this heterogeneity has hindered the comparison and generalization of research findings on the impact of providing psychological services (Kadambi & Ennis, 2004).

In this scenario, it is remarkable the scarcity of studies investigating the effects of professional exposure to narratives of suffering in psychologists in comparison to other disciplines where research has been more prolific. Although different disciplines may have similar experiences with traumatized clients (as profession may not dictate job function), their background may imply the use of different approaches, prisms, and methods in the treatment of trauma and suffering. Thus, it may result in different experiences for the professionals. It is hypothesized that psychologists may present certain peculiarities due to their background that it is worth exploring, as it has already been examined in other professions, such as social workers (Munyororo & Mavhungu, 2021; Rhee et al., 2013; Singer et al., 2020), law professionals (Bakhshi et al., 2021; Hodge Jr & Williams, 2020), and nurses (Kim & Yeo, 2020; Lee & Kim, 2020), to name a few. Additionally, while psychologists are as vulnerable as the general population and other professionals to experiencing psychological issues, they are exposed to certain occupational hazards that may increase such a risk (Kleespies et al., 2011). One of the most relevant risk factors is the very nature of therapy, since providing psychological treatment implies witnessing detailed descriptions and

reenactments of high-emotional-impact life events through a close therapeutic relationship (Arvay, 2001; McCann & Pearlman, 1990). On the other hand, it is a common belief that psychologists are not affected by their job, which leads to the idea that they are somehow immune to negative emotions, mental issues, and emotional distress (Kern, 2014).

To date, research concerning the prevalence of mental issues (i.e., mental disorders, emotional distress, psychological alterations) among psychologists has been limited. However, a number of studies have noted significant rates of anxious and depressive symptoms within these professionals. Pope and Tabachnick (1994) found, in a sample of 800 clinical psychologists from the 42nd Division of the APA (Psychologists in Independent Practice), that 61% had experienced at least one episode of clinical depression; 29% reported suicidal thoughts, and 4% had committed self-harm. In this vein, Gilroy et al. (2002) identified that 62% of psychologists from Division 17 (Counseling) identified themselves as depressed, with 42% describing suicidal thoughts or behaviors. More recently, the British Psychological Society (2019) reported that 40% of NHS psychotherapists informed feeling depressed. Although psychologists appear to take good care of their psychological well-being, as evidenced by their greater use of mental health services compared to the general population (Digiuni et al., 2013), many internalize these beliefs and assume that disclosing their psychological and emotional needs could cast doubts about their professionalism (‘t Lam et al., 2018), to the extent of hiding this information to protect their reputation and credibility (Sawyer, 2011; Zerubavel & Wright, 2012). The barriers psychologists face when disclosing their lived experiences of mental health difficulties have recently been exposed by the British Psychological Society (2020) in a statement report in which adverse personal experiences and mental health issues are acknowledged as an asset for clinical practice.

Despite the growing interest of research on the cost of caring, psychologists remain insufficiently investigated (Barros et al., 2019). To address this matter, two studies were

proposed. First, a systematic review was conducted to examine the impact of occupational exposure to human suffering, in which empirical studies concerning VT, ST, and CF in samples including psychologists were explored. It was hypothesized that psychologists exposed to trauma and suffering would experience significant levels of VT, ST, and CF. Second, three separated meta-analyses were conducted with the aim of integrating the quantitative results of the incidence of each construct of interest, that is, VT, ST, and CF among this professional group. In this study, it was hypothesized that gathering the scores obtained in different studies would reveal high levels of VT, ST, and CF among professionals.

## **Method**

### **Protocol and Registration**

The methodology in this review is compliant with the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) (Moher et al., 2009). The PRISMA protocol is described in Supplementary Materials, S1. This review was registered in the PROSPERO database (CRD42020213314).

### **Eligibility Criteria**

The following inclusion criteria were established: (1) explicit inclusion of psychologists among study samples; (2) standardized measurement through validated instruments applied to one of the constructs of interest (CF, VT, and ST); and (3) provision of at least one effect size estimator or sufficient information to calculate it (means, standard deviation).

Due to the paucity of studies composed only of psychologists, along with their heterogeneity (i.e., constructs, instruments, samples), it was necessary to incorporate studies including other professionals in the sample in addition to psychologists.

### **Exclusion Criteria**

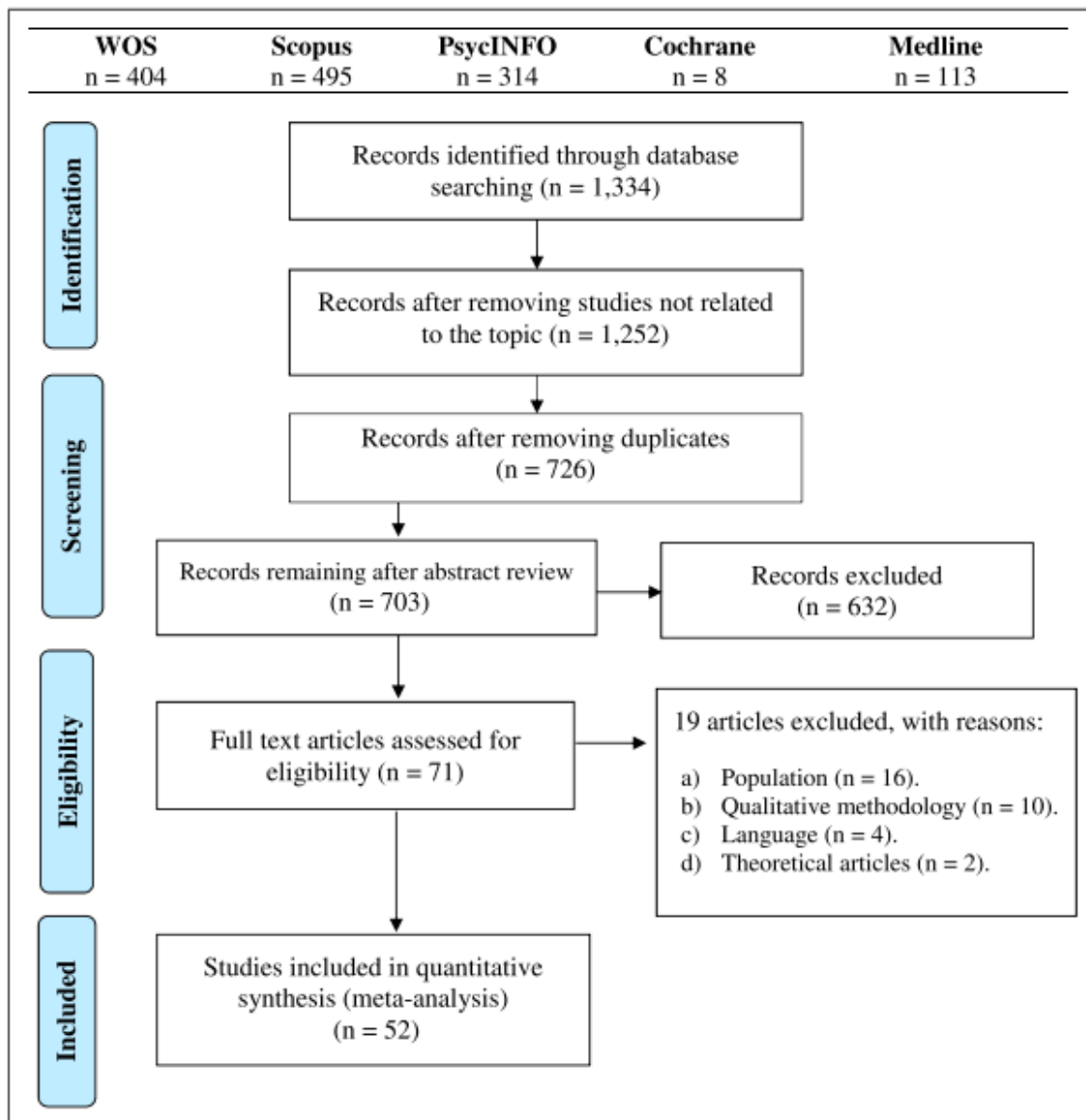
The exclusion criteria were these: (1) studies using samples composed only of professions not relevant to the purposes of the study (e.g., social work, first response, law enforcement, translators) or not explicitly including psychologists; (2) qualitative studies (narrative synthesis, interviews) not providing quantitative measures of the constructs of interest; (3) measurement of the constructs by unique instruments (i.e. instruments that are used only in one paper) that did not allow quantitative integration of the data; and (4) assessment of other work stressors (i.e., burnout).

### **Literature Search and Study Selection**

Two independent researchers explored the following databases between April 2020 and March 2021: PubMed, PsycINFO, Web of Science, and Scopus databases, using the following terms: “secondary traumatic stress” OR “indirect stress” OR “secondary trauma” OR “secondary traumatization” OR “vicarious trauma” OR “compassion fatigue” OR “secondary traumatic stress disorder” AND “psychologist” OR “psychotherapist” OR “counselor”, as well as their Spanish equivalents. No time restrictions were applied. Additionally, the OpenGrey, HMIC, NTIS, and PsycEXTRA databases were examined to search for the gray literature. Disagreements were resolved by discussion and consensus.

The search resulted in 1,334 studies that were examined by two independent researchers. The first screening was conducted on titles, finding 526 duplicate articles that were removed and 82 papers that were not related to the topic. The abstracts of the remaining 726 studies were reviewed using Rayyan QCRI (Ouzzani et al., 2016); from this review, 79 studies were considered of interest and full texts were retrieved for detailed analysis. Finally, nineteen studies were excluded, resulting in 52 papers that were included in the review. The Cohens' kappa coefficient was used to estimate interrater agreement, and the score was .96. The PRISMA diagram of the process is shown in Figure 1.



**Figure 1.** PRISMA Diagram of the Study Selection Process

### Data Extraction

Following the PRISMA guidelines, a protocol was designed to extract the following information from each article, coded by two independent researchers: (a) reference (title, authorship, year of publication), (b) methods (design, sampling, type of sample), (c) response rate, (d) characteristics of the sample (age, sex/gender, ethnicity/race, country), (e) professional information (trauma specialization, personal trauma history, years of experience, professional field), (f) instrument of measurement, (g) quality of the study, and (h) results (mean, standard deviation, confidence interval). Disagreements were resolved by discussion

and consensus. When relevant data for conducting the analysis were missing, the authors were contacted. The risk of bias was assessed by two independent researchers using the Joanna Briggs Institute critical appraisal checklist for analytical cross-sectional studies (Moola et al., 2017).

### **Data Analysis and Effect Sizes**

As already reported in previous studies, the lack of comparison groups (Kadambi & Truscott, 2004; Sabin-Farrell & Turpin, 2003), made it unfeasible to perform a standard meta-analysis; thus a meta-analysis of means was conducted, based on the procedure used by Cieslak et al. (2013), using a random effects model with the mean scores obtained by participants in each scale.

Comprehensive Meta-Analysis version 2 (Borenstein et al., 2013) was used for the analysis. To calculate the effect sizes, means, standard deviations, and sample sizes were used. A meta-analysis was performed for each construct and for each instrument when there were at least four studies using the same measure. To assess the heterogeneity of the studies, statistics  $Q$  and  $I^2$  were used. Due to the variety of constructs and measures, a high level of heterogeneity was expected. A significant  $Q$  statistic ( $p \leq 0.05$ ) indicated significant heterogeneity. The  $I^2$  statistic was used to estimate the percentage of heterogeneity not attributable to random sample error. Following Higgins et al. (2003), it was considered that the heterogeneity was low when it was around 25%, moderate when it was 50%, and high when at 75%.

## **Results**

### **Description of Selected Studies**

Fifty-two studies published between 1995 and 2020 were included, most of them conducted in the United States (43.42%) and Australia (15.09%). All articles were cross-

sectional, except for one experimental study. Sampling was mostly nonprobabilistic, with an average response rate of 43.12%.

Concerning participants, studies comprised 13,481 professionals, 73.62% women ( $n = 9,288$ ) and 26.4% men ( $n = 3,332$ ), with an average age of 43.78 years ( $SD = 5.65$ ); participants were mostly White (84%), and 48% reported a previous history of trauma. Professionals were highly specialized, with 50% of them holding a master's degree or higher (13.59% doctoral degree), and they had long professional experience ( $M = 13.28$  years,  $SD = 6.15$ ). Only thirteen articles (25.43%) had a sample entirely composed of psychologists, but the heterogeneity of these studies (i.e., scope, measures, constructs) impeded further analysis.

Concerning the professional setting, the majority of studies focused on mental health (44.41%,  $k = 24$ ) and clinical services (18.52%,  $k = 10$ ), with a lower representation of specific intervention services such as attention to victims of sexual assault (11%,  $k = 6$ ), trauma (16.75%,  $k = 9$ ), and work with refugees or survivors of torture (9.35%,  $k = 5$ ). No information related to specific methods of intervention (i.e., individual therapy, group therapy) was provided in the articles. As for the type of practice, 32.3% of the professionals worked in private practice and 67.7% in public services ( $k = 5$ ,  $n = 3,133$ ). Respondents were primarily full-time (86.2%). The remainder worked part-time (11%) or casual/voluntary (2.8%). Only one study described the therapeutic approaches of professionals (Cieslak et al., 2013), being the most reported cognitive behavioral therapy (CBT, 90%), followed by cognitive processing therapy (CPT, 42%), and eye movement desensitization and reprocessing (EMDR, 29%). Finally, 71.86% received supervision, although its frequency was not described; therefore, no further information can be provided. Details of each study included in the review can be found in Table 1.

**Table 1.** *Studies Included in the Systematic Review*

| Study                           | RR         | Scale          | N        | Setting   | Age   | Country            | Sex |     | Y.o.E | Purpose of the study  |
|---------------------------------|------------|----------------|----------|---|-------|--------------------|-----|-----|-------|---|
|                                 |            |                |          |   |       |                    | M   | F   |       |   |
| Baird & Jenkins (2003)          | 50-100     | TSIBS          | 101      | Sexual/domestic violence                              | 21-65 | USA                | 4   | 96  | -     | To investigate VT, STS, and BO among trauma counselors.   |
| Beaumont et al. (2016)          | -          | ProQOL         | 54       | Students  | -     | UK                 | -   | -   | -     | To measure associations between self-compassion, CF, wellbeing and BO in students.  |
| Birck (2002)                    | 75%        | TSIBS          | 25       | Torture   | -     | Germany            | 10  | 15  | 5.9   | To examine the prevalence and severity of ST in professionals working with torture victims.   |
| Bride et al. (2009)             | 24%        | STSS           | 225      | Substance abuse                                       | 56    | USA                | 92  | 133 | 23    | To determine if substance abuse counselors are trained to assess and treat trauma and PTSD (...) and to determine to what extent they experience STS.   |
| Buchanan et al. (2006)          | 34%        | IES-R          | 280      | Clinical Psychology                                   | 43    | Canada             | 45  | 235 | 11    | To present research findings from a survey on ST among Canadian MHP.  |
| Carmel et al. (2009)            | 16.8%      | ProQOL         | 106      | Sexual Assault (Adults)                               | 46.11 | USA                | 50  | 56  | 11.61 | To assess the role of therapists' feelings of BO and symptoms of ST in the working alliance with male clients who have committed sexual offenses.   |
| Castelli Dransart et al. (2015) | 23.6%      | IES-R          | 666      | Clinical Psychology                                   | 45.7  | Switzerland/ Italy | 235 | 431 | 18.9  | To identify typical profiles of professionals after a patient suicide.  |
| Cetrano et al. (2017)           | 87%        | ProQOL         | 400      | Clinical Psychology                                   | -     | Italy              | 9   | 299 | -     | To investigate if and how quality of working life affects CF, BO, and CS among MHP.   |
| Cieslak et al. (2013)           | -          | STSS           | 224      | Military  | 48.92 | USA                | 75  | 149 | 16.4  | To test the relationship between indirect exposure to trauma and STS.   |
| Connally (2012)                 | 57%        | ProQOL         | 63       | Clinical Psychology                                   | 39.4  | USA                | 17  | 18  | -     | To explore the relationship between clinician STS and the clinician's sex, ethnicity, and sexual identity.  |
| Diehm et al. (2019)             | -          | STSS           | 78       | Clinical Psychology                                   | 42.85 | Australia          | 13  | 65  | 12.84 | To explore the relationship between personal history of trauma, years of professional experience, level of exposure, age, and the development of STS, and to examine social as a moderating factor. |
| Furlonger & Taylor (2013)       | 50.7%      | IES-R<br>TABS  | 38       | Trauma  | 36.7  | Australia          | 13  | 25  | 4.2   | To investigate the effects of supervision among telephone and online counsellors.   |
| Guerra et al. (2009)            | -          | STSS           | 9        | Clinical Psychology                                   | 30.22 | Chile              | 0   | 9   | 4.89  | To evaluate the effectiveness of a group therapy program for self-care with cognitive-behavioral orientation clinical psychologists with high levels of STS.  |
| Guerra et al. (2015)            | 49.3%      | STSS           | 259      | CSA   | 33.3  | Chile              | 69  | 180 | -     | To compare levels of STS among psychologists working with victims of CSA and general psychologists.   |
| Heeb et al. (2011)              | 33.5%      | IES-R          | 297      | Clinical Psychology                                   | -     | Switzerland        | -   | -   | -     | To investigate the psychometric properties of the French version of the IES-R.  |
| Jacobson (2006)                 | 45.2%      | ProQOL         | 325      | Trauma  | 50.05 | USA                | 143 | 181 | -     | To examine the negative effects (CF) of employee assistance (EA) professionals.   |
| Jacobson (2012)                 | 45.2%      | ProQOL         | 325      | Organizations   | 50.6  | USA                | 143 | 181 | -     | To assess the risk of CF and BO, and the potential for CS among Employee Assistance Professionals.  |
| Kadambi & Truscott (2003)       | 43%        | IES<br>TSIBS-L | 91       | Sexual Assault (Adults)                               | 41    | Canada             | 42  | 49  | -     | To determine if therapists working with sex offenders exhibit signs of VT, to identify associated factors and to explore the relationship between the VT and BO.                                    |
| Kadambi & Truscott (2004)       | 45%        | TSI            | 221      | Sexual violence; Psycho-oncology; Clinical psychology | 42    | Canada             | 35  | 186 | 11,49 | To investigate VT, STS, and BO among mental health professionals working with three different populations (sexual violence, cancer, and general practice).  |
|                                 | 39%<br>37% | IES            | 86<br>64 | Sexual violence<br>Psycho-oncology                    |       |                    |     |     | 6.72  |   |
| Kiley et al. (2018)             | -          | ProQOL         | 24       | Mental Health   | -     | EEUU               | 5   | 27  | 11.43 | To examine the effects of prerecorded guided imagery (GI) on CF and state anxiety.  |
| Kintzle et al. (2013)           | 35%        | STSS           | 70       | Militar   | 42.93 | -                  | 70  | 30  | 14.36 | To explore rates of STS in military primary and MHP.  |
| Kjellenberg et al. (2014)       | 50%        | ProQOL         | 69       | Torture   | 50.36 | Sweden             | 17  | 52  | 9.47  | To evaluate Swedish personnel working with war and torture survivors, focusing on their well-being and variables that might impact it.  |
| La Mott & Martin (2019)         | -          | ProQOL         | 371      | Trauma  | 41.12 | USA                | 22  | 349 | -     | To examine the moderating effects of self-care on various compassion outcomes among MHP.  |
| Laverdière et al. (2019)        | -          | ProQOL         | 240      | Clinical Psychology                                   | 42    | Canada             | 9   | 33  | 13    | To survey psychotherapists about their professional quality of life (CS, STS, and BO), and to compare it with mean levels provided in a recent meta-analysis.                                       |
| Lawson & Meyers (2011)          | 51.7%      | ProQOL         | 506      | Clinical Psychology                                   | 49.9  | USA                | 126 | 380 | 13.6  | To address gaps in the literature concerning counselor wellness in relation to ProQOL and career-sustaining behaviors.  |
| Linley & Joseph (2007)          | 40%        | ProQOL         | 156      | Clinical Psychology                                   | 53.67 | UK                 | 34  | 112 | 15.1  | To explore both positive aspects (CS, personal growth) and negative aspects (CF, BO) of therapists' well-being.   |
| Makadia et al. (2017)           | 33.3%      | STSS<br>TABS   | 564      | Clinical Psychology                                   | 29.84 | UK                 | 57  | 507 | -     | To investigate the relationship between exposure to trauma work and well-being in trainee clinical psychologists.   |
| Manning-Jones et al. (2017)     | -          | STSS           | 365      | Healthcare professionals                              | 48.2  | New Zealand        | 65  | 300 | 17.2  | To investigate whether a curvilinear model explained the VPTG/STS relationship.   |

|                              |       |                 |      |                     |       |           |     |     |       |  |
|------------------------------|-------|-----------------|------|---------------------|-------|-----------|-----|-----|-------|--|
| McKim & Smith-Adcock(2014)   | 17%   | ProQOL          | 98   | Trauma              | -     | USA       | 25  | 73  | -     | To examine the relationship between workplace and individual-level variables and CF/CS, and its predictor variables.   |
| McLean et al. (2003)         | 61%   | IES<br>TSI      | 116  | Clinical Psychology | 25-45 | Australia | 31  | 85  | 11    | To examine the association of therapist beliefs and other variables with VT, BO, and PTSS; and to assess support for VT as a construct separate from BO.                             |
| Newell & MacNeil (2011)      | 42%   | ProQOL          | 167  | Mental Health       | 46    | USA       | 2   | 117 | -     | To examine professional BO, CF, and CS in MHP staff in one Veteran's Affairs hospital.   |
| Newman et al. (2019)         | 79.4% | IES-R           | 135  | Clinical Psychology | -     | Australia | 42  | 90  | -     | To determine the incidence of VT in a sample of correctional health and FMH staff.   |
| Newmeyer et al. (2016)       | -     | ProQOL<br>STSS  | 46   | Trauma              | 22-70 | Romania   | 15  | 31  | -     | To understand the impact of trauma and traumatized communities on trauma therapists.   |
| Nyagaya et al. (2014)        | -     | STSS            | 302  | Clinical Psychology | -     | Kenya     | -   | -   | -     | To compare prevalence of STS among psychotherapists in Nairobi and Nakuru Counties of Kenya.   |
| Olivares et al. (2007)       | -     | STSS            | 113  | Clinical Psychology | 23-77 | Chile     | 36  | 77  | -     | To correlate STS levels, depression levels and self-care strategies in clinical psychologists.   |
| Pearlman & MacIain (1995)    | 32%   | TSIBS           | 188  | Trauma              | 43    | USA       | 52  | 136 | 9.59  | To explore the relations among aspects of trauma therapy, aspects of the therapist, and the therapist's psychological functioning.   |
| Posselt et al. (2019)        | -     | ProQOL          | 50   | Refugees            | 41    | Australia | 11  | 36  | 5.62  | To examine the impact of working with survivors of torture and trauma on the trauma clinician.   |
| Ray et al. (2013)            | 42%   | ProQOL          | 169  | Mental Health       | 43.8  | USA       | 31  | 138 | 17.23 | To determine the relationships among CF, work life conditions, and BO among frontline MHP.   |
| Rayner et al. (2020)         | -     | STSS            | 190  | Mental Health       | 35-44 | Australia | 13  | 177 | -     | To examine STS and related factors of empathetic behavior and trauma caseload.   |
| Robinson-Keiling (2014)      | -     | STSS            | 320  | Clinical Psychology | 51.20 | USA       | 67  | 249 | 17.84 | To test the theoretical model of STS and to extend prior research by directly measuring interpersonal and sexual disruptions and their association with STS.                         |
| Rossi et al. (2012)          | 84%   | ProQOL          | 260  | Mental Health       | -     | Italy     | 83  | 166 | -     | To assess BO, CF, and CS among staff at community-based mental health services (CMHS) of Verona (Italy).   |
| Samios et al. (2012)         | 51.2% | ProQOL          | 61   | Sexual Assault      | 42.39 | Australia | 10  | 51  | -     | To examine whether the negative effects of STS on therapist adjustment would be buffered by PTG.   |
| Somoray et al. (2016)        | 41%   | ProQOL          | 156  | NGO                 | 44.6  | Australia | 28  | 124 | 5.06  | To examine the role of personality and workplace belongingness in predicting CS, STS, and BO in MHP.   |
| Sprang et al. (2007)         | 19.5% | ProQOL          | 1121 | Clinical Psychology | 45.22 | USA       | 321 | 737 | 13.92 | To examine the relationship between CF, CS, and BO, and provider and setting characteristics.  |
| Thompson et al. (2014)       | -     | ProQOL          | 213  | Mental Health       | -     | USA       | 51  | 162 | 12.58 | To use the transactional stress and coping perspective to explore the impact of several variables in MHP.  |
| Tominaga et al. (2019)       | 51.7% | IES-R<br>ProQOL | 230  | Clinical Psychology | 36.1  | Japan     | 65  | 165 | 36.1  | To clarify and expand current understanding of characteristics and factors associated with PTG, STS, and PTSD symptom development following clinicians' indirect exposure to trauma. |
| Trippany et al. (2003)       | 31.7% | TSIBS-L         | 48   | Sexual Assault      | 24-68 | USA       | 0   | 48  | 7.11  | To examine variables that may promote VT among therapists serving adult survivors of sexual victimization vs. therapists serving child survivors of sexual victimization.            |
| Way et al. (2004)            | 23%   | IES             | 347  | Sexual Assault      | 45.6  | USA       | 137 | 210 | -     | To explore the level of VT in therapists working with survivors and with sexual offenders, to examine variables associated with VT-.   |
| Williams et al. (2012)       | 39.4% | TABS            | 131  | Clinical Psychology | 42.18 | USA       | 48  | 83  | 10.31 | To test a comprehensive model of factors contributing to the development of VT in MHP.   |
| Zeidner et al. (2013)        | -     | ProQOL          | 89   | Mental Health       | -     | Israel    | 24  | 65  | -     | To examine the role of some personal and professional factors in compassion fatigue among health-care professionals.   |
| Želeskov-Đorić et al. (2012) | -     | TABS            | 68   | Trauma              | -     | Serbia    | 20  | 48  | 13    | To investigate the relationship between resilience, personal meaning and VT in trauma therapists.  |

Note. RR (response rate), M (male), F (female), YoE. (years of experience), IES (Impact of Events Scale), IES-R (Impact of Events Scale Revised), STSS (Secondary Traumatic Stress Scale), TABS (Trauma and Attachment Belief Scale), TSIBS (Traumatic Stress Institute Belief Scale), ProQOL (Professional Quality of Life), NGO (non-governmental organizations), CSA (child sexual abuse), STS (secondary traumatic stress), VT (vicarious trauma), BO (burnout), PTG (posttraumatic growth), CF (compassion fatigue), CS (compassion satisfaction); PTG (posttraumatic growth); MHP (mental health professionals).

### Quality of the Studies

The quality of the studies was evaluated by two independent researchers using the Newcastle–Ottawa scale (Wells et al., 2000) adapted to the needs and purposes of this study (See Supplementary Materials, S2). Interrater agreement was “almost perfect” ( $k = .96$ ), following Landis and Koch (1977). Conflicts were resolved through discussion and consensus.

### Systematic Review

**Vicarious Trauma.** Eleven studies explored the relationship between providing psychological services and cognitive disruptions. VT was assessed through the Traumatic Stress Institute Belief Scale (TSI-BSL; Pearlman, 1996) in seven studies. This instrument, composed of 80 items in a 6-point Likert scale (1 = “Disagree Strongly” to 6 = “Agree Strongly”), explores cognitive disruptions in five schemas that are sensitive to traumatic experiences (safety, trust, esteem, intimacy, and control), which are assessed toward the self and the others, resulting in 10 subscales (self-safety, other-safety, self-trust, other-trust, self-esteem, other-esteem, self-intimacy, other-intimacy, self-control, and other-control). The TSI-BSL Cronbach’s alpha is .93, and the consistency of the subscales ranges from .65 to .84 (Pearlman & Mac Ian, 1995).

Later on, a revision of the TSI-BSL was published, the Trauma and Attachment Belief Scale (TABS; Pearlman, 2003). The TABS adds four items, yet the two measures are statistically equivalent (Pearlman, 2003). The scale is composed of 84 items in a 6-point Likert scale. Its Cronbach’s  $\alpha$  is .96, with an acceptable internal consistency with alpha values for the subscales ranging from .67 to .87. The TABS was used in four studies.

In the review, VT remained at subclinical or threshold levels according to the cutoff scores for TABS and TSI-BSL in all studies. However, the subscales with the highest scores were those associated with personal safety and the safety of others (Makadia et al., 2017;

Želeskov-Đorić et al., 2012), which is coherent with the fact that most of the studies involved therapists working with the topic of interpersonal violence (e.g., sexual assault, domestic violence). Insufficient information about the subscales was provided; thus, no further analysis could be conducted.

Attending to the risk factors, similar variables to those found in CF and ST were present in VT. Concretely, regarding the level of exposure to suffering, it is important to note that the underpinning theoretical framework of this construct stipulates that repeated exposure to traumatic narratives disrupts the therapist's cognitive patterns. However, empirical evidence has yielded inconclusive results. In this sense, while Pearlman and Mac Ian (1995), with trauma therapists, and Williams et al. (2012), with professionals assisting victims of sexual and domestic violence, reported this relationship, Kadambi and Truscott (2003), also studying professionals assisting victims of sexual violence, and Makadia et al. (2017), in trainees of clinical psychology, did not support this hypothesis. Moreover, some studies have even reported an inverse relationship (Baird & Kracen, 2006; Trippany et al., 2004). While no explanation has been given for these findings, it is plausible that repeated exposure to trauma narratives produces a habituation to the stimuli, which may minimize the therapist's response to the client stories. Nevertheless, risk factors (e.g., gender, age of experience, training) were inconclusive, thus no further analysis can be provided.

As for protective factors, studies highlighted the importance of training (Makadia et al., 2017) and emotional venting, either through supervision (Furlonger & Taylor, 2013) or peer support; the therapist's beliefs (McLean et al., 2003); and their personal resources (i.e., resilience and meaning).

**Secondary Trauma (ST).** Twenty-one studies analyzing ST were included. This construct was assessed with three scales: Impact of Event Scale (IES), Impact of Event Scale-Revised (IES-R), and Secondary Traumatic Stress Scale (STSS). Although the *Professional*

*Quality of Life Scale* (ProQOL; Stamm, 2005, 2010) includes an ST subscale, it is used as a measure of compassion fatigue. It was decided to keep the subscale as a measure of CF as originally intended by the authors in the primary studies.

The IES (Horowitz et al., 1979) examines the subjective distress caused by adverse life events through 15 items rated on a 5-point Likert scale (0 = “not at all”, 4 = “often”) in which the individual indicates the frequency of symptom during the last week. Although this scale is intended to assess the impact of any stressful experience, it has been used as a measure of PTSD (Thoresen et al., 2010). Concerning the psychometric properties, Horowitz et al. (1979) reported high reliability for the total scale and adequate internal consistency for the subscales ( $\alpha = .78-.82$ ). Thereafter, Weiss and Marmar (1997) developed the IES-R, and included six items of psychological activation and one item to measure dissociative intrusions according to the DSM-IV diagnostic criteria for PTSD. The IES-R is composed of 22 items: seven measuring intrusions, eight for avoidance, and seven for arousal. Its high internal consistency ( $\alpha = .79-.94$ ) has been reported in different studies (Creamer et al., 2003; Beck et al., 2008). It is important to note that these two scales (IES and IES-R) are not diagnostic tools for PTSD; they are aimed to assess individual responses of traumatized individuals, having been extrapolated to the professional context for secondary trauma research.

The STSS (Bride et al., 2004) is a specific self-report about the impact of indirect trauma in professionals composed of 17 items. The frequency with which each statement occurs is measured on a five-point Likert scale, ranging from “never” (1) to “very often” (5). It has three subscales: intrusion, avoidance, and arousal; and provides three approaches to interpreting the scores (Bride et al., 2007): (a) risk level of ST (using the 38-point cutoff score), (b) frequency of posttraumatic stress symptoms (PTSS) and (c) caseness (through an algorithm that determines whether the individual meets the core diagnostic criteria for



PTSD). The STSS has good reliability for the total scale ( $\alpha = .93$ ) and good internal consistency (subscales' alpha ranging between .80 and .87).

No significant differences in the level of ST measured by the three scales were observed. In general, the severity of the symptomatology was described as low or subclinical, except for four exceptions in which high-severe ST was observed. Tominaga et al. (2019), in a study involving psychotherapists who attended Tohoku (Japan) earthquake survivors, found that one-fifth showed clinically significant symptomatology, and this was especially intense for those working in schools with missing or deceased students. Similarly, Nyagaya et al. (2014) identified that 48% of the psychotherapists in Kenya presented high-severe symptoms, most notably when practicing in Nairobi, where authors reported the occurrence of several traumatic incidents occurring before data collection (e.g., bombing, fire). Buchanan et al. (2006), who also found a significant incidence, noted that 61% of the practitioners reported a previous history of abuse, and 32% of them expressed that these experiences were still having an impact in their lives. Finally, in an experimental study by Guerra et al. (2009), exploring the effectiveness of treatment for this condition, it was an inclusion criterion for participation that psychologists had obtained clinical ST scores (those not reaching the cut-off scores were not included). In these studies, the effect of shared traumatic reality (STR, Freedman & Tuval Mashiach, 2018; Tosone et al., 2012) seems to be present, that is, professionals were doubly exposed to the adverse event: by their direct experience (primary trauma) and by the experience of their clients (secondary trauma). Therefore, it is not possible to assert whether the symptoms were caused by direct or indirect exposure, or a combination of both. Nonetheless, shared trauma was not addressed in any of these papers.

The STSS showed differences depending on the correction that was applied. When using the cut-off score (38 points) proposed by Bride et al. (2004), most studies described low levels of posttraumatic symptomatology, but when the results were interpreted

considering the symptomatic frequency, a different scenario emerged. Bride et al. (2009) found that 56% of substance abuse counselors had at least one symptom of PTSD, with intrusions (43%), reexperimentation (15%), and nightmares (8%) being the most frequent symptoms. Whereas 44.4% of the participants had no PTSS at all, 19% experienced symptoms compatible with a probable diagnosis of PTSD. Cieslak et al. (2013) reported that 19.2% of military mental health professionals obtained a diagnosis of PTSD. Kintzle et al. (2013), in the same setting, found that 59% of their participants had at least one PTSD symptom, and 8% had severe symptoms. Diehm et al. (2019) noted that 9% of clinical psychologists had moderate symptomatology, 4% high, and 13% severe. Similarly, Kadambi and Truscott (2004) found that 20.80% of their participants showed moderate-severe distress. Rayner et al. (2020) found that 75.2% of their participants exhibited a PTSD symptom, while 29.5% met the criteria for a PTSD diagnosis. Finally, 48.2% of the psychotherapists in the study by Nyagaya et al. (2014) had a high ST. In line with the previous argument, although all studies asked for participants to answer on the basis of indirect trauma, the high incidence of personal trauma histories might be a relevant variable affecting all the symptoms that have been reported, showing primary instead of secondary symptoms. For example, in the study by Cieslak et al. (2013), 44% of professionals had a military background and 19% had been deployed. All participants referred to having experienced at least one traumatic event, with an average of three. Consequently, it is possible that professionals were describing symptoms stemming from their own experience.

Several risk and protective factors were described throughout the studies (e.g., gender, previous history of trauma, professional experience, self-care strategies, compassion satisfaction). However, conclusions could not be drawn because of the inconsistency of the data.

**Compassion Fatigue.** Twenty-one studies examined CF through the Professional Quality of Life scale (ProQOL; Stamm, 2005, 2010). This scale evaluates the quality of professional life, understood as the compendium of the positive (compassion satisfaction) and negative (compassion fatigue, composed of burnout and secondary trauma) effects of providing health care. The ProQOL is a 30-item questionnaire assessing the frequency with which the respondent has experienced symptoms as a consequence of their work during the last 30 days using a five-point Likert scale (1 = “never” to 5 = “very often”).

The ProQOL is comprised of three subscales: compassion satisfaction (CS), burnout (B), and secondary traumatic stress (ST). However, the three-dimensional model has not been consistently supported by research (Geoffrion et al., 2019; Hemsworth et al., 2018), being one of the reasons the overlap between the burnout and the secondary trauma subscales (Cieslak et al., 2014). While it is important to note that the ProQOL provides results for three separated subscales (CS, B, and ST), it is common to find research studies that report indistinctly ST as CF. Regarding the psychometric properties of ProQOL, Stamm (2010) provides indicators of the validity of the scale, but the paucity of independent studies available that examine these aspects have raised concerns (Geoffrion et al., 2019). As described by Stamm (2010), this scale is not a diagnostic tool. Consequently, all interpretations of this scale should be cautious.

The risk of CF was described as low-medium across studies. The highest levels of CF were reported by Kjellenberg et al. (2014) in professionals working with torture victims; by Posselt et al. (2019) with refugees; and by Somoray et al. (2016) with professionals associated to NGOs, all related to trauma; while lower levels of CF were observed in professionals working at clinical contexts (i.e. private practice, hospitals). This is an interesting finding, because even though the ProQOL conceives CF as the combination of B and ST, the frequency of responses for each item was not reported in any of the studies, not

being possible to examine whether these higher scores were due to a greater response rate to items related to PTSD.

The severity of CF appeared to hinge upon the confluence of occupational, organizational, and personal risk factors. Among the first, organizational and occupational factors, the variable that seemed to predict CF most strongly was the amount of exposure to suffering, measured through the number of clients, the time spent providing psychological services, and years of experience (Laverdière et al., 2019; Linley & Joseph, 2007; McKim & Smith-Adcock, 2014). The length of the professional career was reported as a recurrent risk factor throughout the literature, but results were contradictory, with one study even reporting an inverse relationship between fatigue and career longevity (Laverdière et al., 2019).

Regarding the variables of the therapists, inconclusive results were found. Regarding gender, although it has been argued that women are more vulnerable to CF, in this review there were no conclusive results. With regard to the therapists' previous history of trauma (primary trauma), it seemed to be associated with an increased risk of CF in general (Kjellenberg et al., 2014; La Mott & Martin, 2019; Ray et al., 2013; Somoray et al., 2016). CF was found to be inversely associated with CS (Linley & Joseph, 2007; McKim & Smith-Adcock, 2014), defined as "the ability to receive gratification from caregiving" (Simon et al., 2005, p. 6), regardless of the professional setting and the presence of other risk factors. CS was described as a protective factor, being explored through the practitioners' beliefs, and understanding of therapy, and by their efforts to provide high-quality psychological services. CS was found to be higher among those professionals who used more positive coping strategies such as venting with coworkers about work-related stress, practicing physical exercise, spirituality (Jacobson, 2012), personal therapy (Linley & Joseph, 2007; McKim & Smith-Adcock, 2014), self-care (La Mott & Martin, 2019), self-compassion (Beaumont et al., 2016), and specific training related to the work demands (Kjellenberg et al., 2014; Sprang et

al., 2007). Additionally, higher satisfaction was observed in healthy organizations, being some indicators the perception of having control over the working environment (Laverdière et al., 2019; McKim & Smith-Adcock, 2014; Thompson et al., 2014), belongingness to the organization (Somoray et al., 2016), having access to supervision (Jacobson, 2012; Linley & Joseph, 2007), and practicing under certain theoretical orientations such as humanistic therapies (Linley & Joseph, 2007).

### Meta-Analysis

The results of the meta-analyses conducted for each construct and instrument are summarized in Table 2. The meta-analyses were conducted using the general scores of each scale. Corresponding authors were contacted, but not enough data was obtained to perform further analysis.

**Table 2.** Results of the Metanalyses for Secondary Trauma, Compassion Fatigue and Vicarious Trauma.

| Studies Included |         |    |        | Effect |        | Heterogeneity |          |                |
|------------------|---------|----|--------|--------|--------|---------------|----------|----------------|
| Construct        | Scale   | k  | M      | 95% IC |        | Z             | Q-value  | I <sup>2</sup> |
| ST               | STSS    | 11 | 32.80  | 29.77  | 35.83  | 21.209***     | 2388.175 | 99.539         |
|                  | IES-R   | 6  | 17.51  | 8.62   | 26.40  | 3.86***       | 929.708  | 99.462         |
|                  | IES     | 4  | 20.87  | 16.20  | 25.54  | 8.76***       | 135.025  | 97.038         |
| CF/ST            | PROQOL  | 21 | 19.075 | 15.969 | 22.180 | 12.038***     | 5894.352 | 99.661         |
| VT               | TSIBS-L | 7  | 180.09 | 155.01 | 205.16 | 14.08***      | 950.888  | 99.159         |
|                  | TABS    | 4  | 144.66 | 62.73  | 226.58 | 3.46***       | 5461.103 | 99.945         |

Note. This table informs only of the analysis for which four or more studies were available.

Note. 2. STSS (Secondary Traumatic Stress Scale), IES-R (Impact of Event Scale-Revised), IES (Impact of Event Scale), PROQOL (Professional Quality of Life), TSIBS (Traumatic Stress Institute Belief Scale), TABS (Trauma and Attachment Beliefs Scale).

\*\*\*  $p < 0.001$ .

**Vicarious Trauma.** A total of seven studies used the TSI-BSL (Pearlman, 1996), yielding an average score of 180.09 (IC95% = 155.01–205.16). Values of this scale range between 80 and 480, with higher scores indicating greater impact.

Four articles employed the TABS, with an average score of 144.66 (IC95% = 62.73–226.58).

Mean scores of both scales indicate mild or subclinical impairment as measured by these scales. Since the studies did not provide data for each subscale, further analysis could not be conducted.

**Secondary Trauma.** Twenty-one studies exploring the relationship between dispensing psychological services and secondary trauma were analyzed through STSS ( $k = 11$ ), IES-R ( $k = 6$ ), and IES ( $k = 4$ ).

The average scores obtained from STSS showed a low symptomatology ( $M = 32.80$ ,  $IC95\% = 29.77-35.83$ ), following the cutoff scores established by Bride et al. (2004) ( $< 28 =$  very low;  $29-37 =$  low;  $38-42 =$  moderate;  $44-48 =$  high;  $> 49 =$  severe).

In those studies that employed IES, the average score was 20.87 ( $IC95\% = 16.20-25.54$ ), showing mild impairment ( $0-8 =$  subclinical;  $9-25 =$  mild;  $26-43 =$  moderate;  $> 44 =$  severe).

Finally, the average score of the IES-R was 17.51 ( $IC95\% = 8.62-26.40$ ). Although there is no specific scoring for this scale, it has been proposed that  $\geq 26$  points would indicate risk of ST (Buchanan et al. 2016); therefore, no clinically relevant scores were reached using these scales.

**Compassion Fatigue.** Twenty-one studies used ProQOL to explore CF. Meta-analysis was performed with the CF score (as it was defined by the primary studies) which corresponded to the scores obtained on the CF/ST subscale (the ProQOL does not provide a CF score).

The average score obtained by the mean meta-analysis was 19.07 ( $IC95\% = 15.96-22.18$ ). The interpretation of this value varies depending on the version of the manual used, as the cutoff scores of the subscales have changed with every version of the instrument. In this way, according to the scoring norms by Stamm (2005), there was a high risk of CF (cutoff score = 17), while using Stamm (2010) there was no risk of CF (cutoff score = 22).

Finally, using the scores provided by De La Rosa et al. (2018), as Laverdière et al (2019) previously did, the risk of CF among the professionals was medium (cutoff score = 17).

Table 3 provides further details about scoring differences using these methods.

**Table 3.** *Cut-off scores for the Compassion Fatigue/Secondary Trauma Subscale of the PROQOL.*

| <b>Value</b> | <b>Stamm (2005)</b> | <b>Stamm (2010)</b> | <b>De la Rosa et al. (2018)</b> |
|--------------|---------------------|---------------------|---------------------------------|
| High         | 17                  | 42                  | 21                              |
| Medium       | 13                  | 23-41               | 17                              |
| Low          | 8                   | 22                  | 13                              |

### **Discussion**

The aim of this review was to examine the evidence about the effects of occupational exposure to suffering in psychologists by integrating empirical research on VT, STS, and CF. Although previous reviews have been conducted (e.g., Baum, 2016; Baum & Moyal, 2020; Beck, 2015; Nimmo & Huggard, 2013), to our knowledge, this is the first quantitative synthesis that has intended to address this issue among this discipline. For this aim, 52 articles with 10,233 professionals from different settings (i.e., educational, clinical, military, NGOs) were included. Although methodological flaws hindered this purpose forcing us to include studies considering other mental health professionals along with psychologists, relevant findings were obtained (Table 4).

**Table 4.** *Summary of Critical findings.*

- The constructs Compassion Fatigue, Vicarious Trauma, and Secondary Trauma are frequently used in healthcare settings. However, its vague operationalization has hampered its empirical study
- Although most of professionals providing psychological services do not experience significant stress associated with providing psychological services, some of them develop clinically significant symptoms

- 
- There is a remarkable lack of studies focused on the impact of delivering psychological services in psychologists
  - It is necessary to define precisely and delimit properly the constructs CF, VT, and ST before developing more research since without a shared framework results are inconsistent and ambiguous
- 

Our main finding is that, while the literature suggests that most professionals providing psychological services do not experience significant distress as a consequence of their work, some of them develop clinically relevant symptomatology. Overall, meta-analyses showed low levels of ST, CF, and VT among the samples when using quantitative interpretations (cut-off scores). Nevertheless, the systematic review showed different results when using alternative interpretations (i.e., qualitative, algorithms, alternative scoring proposals). For example, using symptom frequency instead of scoring with the STSS revealed that about 20% of professionals present symptoms compatible with a PTSD diagnosis (Bride et al., 2004; Cieslak et al., 2013; Rayner et al., 2010). This is interesting since the incidence of PTSD in the general population is estimated at around 8% (Bryant, 2019). Hence, data suggest that the prevalence of PTSD in professionals might be closer to percentages found in clinical samples (see Lewis et al., 2019; Tang et al., 2020), which may reflect the deep impact of occupational exposure to suffering. Similarly, the risk for CF was described as low-medium across studies, yet differences depending on the cutoff scores applied for interpreting the scores were found. VT levels were mild, not being possible to further examine the results due to the lack of alternative interpreting methods and the data scarcity on the subscales. These findings suggest that there may be discrepancies in the prevalence of these conditions depending on the assessment strategy used. This is a relevant point to be considered in future research, since the real incidence of psychological distress amongst professionals may not be detected, and a multi-method approach could be needed.



That being said, while the data is not conclusive, it suggests that the percentage of professionals who have experienced adverse work-related consequences may not be as low as has been reported in the literature (Elwood et al., 2011; Hensel et al., 2015).

Another relevant finding of the present study is related to the constructs that have been explored (i.e., VT, ST, CF). Although these conditions are frequently described in the health care context, the lack of scientific rigor has led to their questioning (Kadambi & Enis, 2004; Sabin-Farrell & Turpin, 2003; Sexton, 1999). Thus, even when the results indicate that occupational exposure to suffering affects professionals, with the available evidence it is not possible to assert this relationship. The research in this area has been inconsistent and ambiguous (Sabin-Ferrel & Turpin, 2003). Consequently, the study of other aspects, such as risk and protective factors, as well as their consequences, and effective preventive interventions, has also been obscured. Yet, a common protective factor was detected across the studies on CF: compassion satisfaction. Previous studies have underlined the role of CS in reducing the impact of distress in the caring professions (Grant et al., 2019; Osofsky et al., 2008). Thus, while professionals are often aware of the effects of their work on their psychological and emotional well-being, CS is commonly described as the positive counterpart. The benefits of helping others can compensate for the emotional distress incurred from providing psychological services (Pérez-Chacón et al., 2021). For example, Răbu et al. (2016) interviewed 12 former therapists to explore the impact of their profession on their personal lives, and found that the most frequent theme was the privilege of being close to other people, underlining how enriching it was to have had the opportunity of being part of other people's history, and to have witnessed the processes of change. Similarly, Michalchuk and Martin (2019) found impacts of privilege and satisfaction in trauma psychologists.

In light of the positive effects of CS on the well-being of professionals, it is quite curious that no positive counterpart of VT or ST is reported in all studies. In recent years, increased attention has been paid to the benefits of providing psychological services, which has given rise to concepts such as post-traumatic growth (PTG; Tedeschi & Calhoun, 2004), vicarious resilience (Hernández et al., 2010) and shared resilience in traumatic situations (SRTS, Nuttman-Shwartz, 2015, 2019). Yet, none of these constructs were mentioned in any of the studies in our review. This is interesting, as focusing on these positive effects may help explain some of the conflicting findings in previous studies. For example, despite the interest on the costs of caring, research suggest that most of the professionals seem to cope well with their work with human suffering (Kadambi & Ennis, 2004). It is possible that, as it happens with CS, other positive work outcomes such as shared resilience may have a buffering effect, leading to minor impact. As an example, in the case of psychologists and psychotherapists, CS and PTG have been linked to the professional's own mental issues (Cvetovac & Adame, 2017; Gilroy et al., 2002; Kaur, 2017), which could be associated with the variable "previous history of trauma" that was frequently reported in the studies analyzed in this review. The experience of psychological issues or traumas in professionals has been explored under the denomination of the "wounded healer" (Gelso & Hayes, 2007). Zerubavel and Wright (2012) pointed out that, because of the positive effects of these professionals on the therapeutic process (e.g., a deeper understanding of the client, greater empathy, patience), the history of trauma could have a protective effect through its relationship with PTG. Consequently, to better understand the effects of providing psychological services, it seems necessary to devote more room for its positive effects along with the negative ones, as both dimensions seem to concur. In addition, it is important to consider aspects such as shared trauma and double exposure, as they may act as moderating variables and, therefore, affect the results.

Lastly, it is important to note the lack of studies focused on psychologists. While it is true that there are other professionals who are also exposed to narratives of trauma and suffering, there is a significant difference in the endeavors devoted to exploring the impact of VT, ST, and CF depending on the discipline. In this sense, numerous studies exploring these conditions in healthcare (nurses, practitioners) and non-health care (lawyers, interpreters, police officers) professions were identified (Backman et al., 1997; Beck, 2011; Brady, 2017; Jenkins & Warren, 2012), yet the number of studies focused on psychologists was negligible. Given that psychologists are constantly exposed to narratives of suffering and considering the negative impact myths such as the untroubled therapist seems to have as a barrier for help-seeking behaviors among these professional group (Adams, 2013), the lack of attention directed to this group is remarkable.

Despite all the challenges, inconsistencies, and ambiguities found in the empirical approximation to VT, ST, and CF, what seems to remain constant across the studies is the fact that not all professionals exhibit the same impairment—even when working in the same context—as they can have different stress responses, courses, and levels of interference. Consequently, more research is needed to fully understand the effects of providing psychological services. Overall, it is important to bear in mind that the use of VT, ST, and CF labels implies a risk of pathologizing normal, complex, and understandable human responses to distressing events and circumstances.

### **Limitations**

The results presented in this review should be interpreted with caution due to a number of limitations. First, although our main purpose was to examine how exposure to suffering affects psychologists due to their specific characteristics, it was not possible to include studies composed exclusively of these professionals due to their scarcity and heterogeneity. However, this limitation raised awareness about the lack of studies focused on

psychologists. Second, regarding the systematic review all the studies but one were cross-sectional, which impedes drawing up causal relationships. Third, most of the samples of the studies included in this review were collected by non-probabilistic procedures, meaning that self-selection biases could exist. Additionally, most of the studies did not provide information on aspects of the sample such as their theoretical orientation, social class, or membership of minority social groups that could shed light on the possible influence of different life experiences on the impact of providing psychological services. Thus, it cannot be examined whether a different composition would have provided different outcomes. Forth, there are variables that could not be controlled that may influence results, such as the fact that literature point out that professionals with the greatest levels of distress end up leaving the field. Consequently, it is possible that the absence of these professionals has an impact on research findings. Finally, in relation to the meta-analysis, the lack of comparison groups made it impossible to perform a traditional meta-analysis, impeding the type of analysis provided that characterizes this method.

### **Conclusion**

While it is becoming increasingly common for people to go to therapy for prevention and for self-care, the psychologist's office is still a space connected to psychological pain. Therefore, professionals are constantly exposed to narratives of suffering and distress, which can negatively affect them at emotional, physical, and relational levels. Regardless of the debate surrounding these constructs, it is a fact that some professionals providing psychological services are affected by their work, and exhibit symptoms that are consistent with VT, ST, and CF. These disruptions are worsened by barriers that make it difficult to disclose information about lived mental health difficulties, including stigma (social, institutional, and internalized), discrimination, and the stoicism that predominates in care settings and hampers the search for help. The cost of these conditions is not limited to the

professional's health; it has a systemic character, with human, economic, and organizational burdens. Some of the negative consequences that work-related stressors may have in the mental health field are the damage to patients and the profession (APA, 2008), and the cost of professionals leaving the field (McCormack et al., 2018; Schilling et al., 2018), which imply an enormous loss of resources (Harrison & Westwood, 2009).

It is therefore essential to advocate for conducting rigorous research on VT, ST, and CF first, as preventative and intervention measures ought to be grounded in solid theoretical models and empirical evidence, which, to date, has not been possible. As these conditions are not yet fully understood, it is necessary to investigate them in order to minimize the distress experienced by these professionals.

#### **Implications for practice, policy, and research.**

*Implications for practice.* Since any individual professionally exposed to human suffering may experience VT, ST, and CF -as no determining factors have yet been identified- it may be convenient to incorporate these conditions as a part of the academic training programs to raise awareness of their existence and symptomatic expression. Making trainees familiar with these conditions may contribute to normalize them and to interpret them as a normative outcome from the exposure to narratives of suffering. As it has been expounded, mental health professionals may be reluctant to seek for help when experiencing occupational distress due to the myths surrounding these professions. Normalization of suffering resulting from professional exposure to traumatic content could be a key element for destigmatization.

*Implications for research.* In light of our results and the challenges found in the literature on the cost of caring, it is imperative to develop a shared framework to analyze these conditions, starting with their operationalization to build a common definition of each construct.

The impact of these conditions has fostered over the last years a growing interest in the development of prevention and intervention measures (Kim et al., 2021). Preventive measures such as supervision (Ashley-Binge & Cousins, 2020; Branson, 2019), self-care (Flint, 2018; Michenbaum, 2007), or psychological treatments including CBT (Pirelli et al., 2020), debriefing (Grundlingh et al., 2017; Scott et al., 2021), mindfulness, and Acceptance and Commitment Therapy (Pakenham & Stafford-Brown, 2012; Pirelli et al., 2020). However, despite this variety of measures, none of them have been proven to be effective evidence-based practices (i.e., lack of systematic empirical research evaluating its effectiveness, lack of RCTs). The reason underpinning the lack of evidence on the effectiveness of prevention and intervention measures may be the challenges found in the literature about these constructs. As stated by Kadambi & Ennis (2004, p. 7) regarding the body of empirical research of VT, but translatable to CF and ST, conceptual and empirical support for these constructs is inconsistent and “hindered by lack of empirical rigor and difficulties relating to the operationalization and measurement”. Thus, interventions to address these phenomena may be premature (Kadambi & Ennis, 2004; Kadambi & Truscott, 2003; Sabin-Farrell & Turpin, 2003). It is essential to conduct rigorous research first, as these preventative measures should be grounded in solid theoretical models and empirical evidence, which to date has not been possible due to the underlying challenges of these constructs.

Finally, it is necessary to examine how these conditions affect professionals from different disciplines and areas of specialization, and to report them separately, as the level of exposure and the nature of their work may differ. Although different professionals may have similar functions, it is important to analyze them separately to explore the existence of specific variables and, ultimately, develop effective preventive and intervention measures.

Table 5 summarizes the implications for practice and research.

**Table 5.** *Implications for Practice, Policy and Research.*

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***Practice***

- Since any individual professionally exposed to human suffering may experience VT, CF and ST - as no determining risk factors have yet been identified - it may be convenient to incorporate these conditions as part of academic training programs in order to raise awareness of their existence and symptomatic expression
- Normalizing these experiences as a normative outcome from the constant exposure to narratives of suffering is a key element for their destigmatization

***Research***

- It is imperative to build a shared framework to analyze these conditions, starting with their operationalization in order to build a common definition of each one of them
  - Prevention and intervention programs for these conditions ought to be grounded in solid theoretical models and empirical evidence, which to date has not been possible due to the underlying challenges of these constructs
  - - It is necessary to examine how these conditions affect professionals from different areas of specialization, as the level of exposure and the nature of their work differ (e.g., psychologists vs. nurses)
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## References

References marked with an asterisk indicate studies included in the meta-analysis.

- ‘t Lam, C., Vingerhoets, A., & Bylsma, L. (2018). Tears in therapy: A pilot study about experiences and perceptions of therapist and client crying. *European Journal of Psychotherapy and Counselling*, 20(2), 199–219. DOI: [10.1080/13642537.2018.1459767](https://doi.org/10.1080/13642537.2018.1459767)
- Adams, M. (2013). *The myth of the untroubled therapist: Private life, professional practice*. London: Routledge.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: APA.
- Arvay, M. J. (2001). Secondary traumatic stress among trauma counsellors: What does the research say? *International Journal for the Advancement of Counselling*, 23(4), 283–293.
- Ashley-Binge, S., & Cousins, C. (2020). Individual and organisational practices addressing social workers’ experiences of vicarious trauma. *Practice*, 32(3), 191–207.
- \*Baird, K., & Kracen, A. C. (2006). Vicarious traumatization and secondary traumatic stress: A research synthesis. *Counselling Psychology Quarterly*, 19(2), 181–188. DOI: [10.1080/09515070600811899](https://doi.org/10.1080/09515070600811899)
- Bakhshi, J., Wesley, M. S., & Reddy, K. J. (2021). Vicarious Trauma in Law Students: Role of Gender, Personality, and Social Support. *International Journal of Criminal Justice Sciences*, 16(1), 34–50.
- Barnett, J. E., & Hillard, D. (2001). Psychologist distress and impairment: The availability, nature, and use of colleague assistance programs for psychologists. *Professional Psychology: Research and Practice*, 32(2), 205–210. DOI: [10.1037/0735-7028.32.2.205](https://doi.org/10.1037/0735-7028.32.2.205)
- Barros, C., Baylina, P., Fonte, C. & Alves, S. (2019). Psychosocial risks factors among psychologists: What are we talking about? In P. M. Arezes, J. S. Baptista, M. P. Barroso, P. Carneiro, P. Cordeiro, N. Costa, R. B. Melo, & A. S. M. Gonçalo Perestrelo. *Occupational and Environmental Safety and Health* (pp. 541–553). Switzerland: Springer
- Baum, N. (2016). Secondary Traumatization in Mental Health Professionals: A Systematic Review of Gender Findings. *Trauma, Violence, & Abuse*, 17(2), 221–235. DOI: [10.1177/1524838015584357](https://doi.org/10.1177/1524838015584357)
- Baum, N., & Moyal, S. (2020). Impact on Therapists Working with Sex Offenders: A Systematic Review of Gender Findings. *Trauma, Violence, & Abuse*, 21(1), 193–205. DOI: [10.1177/1524838018756120](https://doi.org/10.1177/1524838018756120)
- \*Beaumont, E., Durkin, M., Hollins Martin, C. J., & Carson, J. (2016). Measuring relationships between self-compassion, compassion fatigue, burnout and well-being in student



- counsellors and student cognitive behavioural psychotherapists: A quantitative survey. *Counselling and Psychotherapy Research*, 16(1), 15–23. DOI: [10.1002/capr.12054](https://doi.org/10.1002/capr.12054)
- Beck, C. T. (2011). Secondary traumatic stress in nurses: A systematic review. *Archives of Psychiatric Nursing*, 25(1), 1–10. DOI: [10.1016/j.apnu.2010.05.005](https://doi.org/10.1016/j.apnu.2010.05.005)
- Beck, J. G., Grant, D. M., Read, J. P., Clapp, J. D., Coffey, S. F., Miller, L. M., & Palyo, S. A. (2008). The impact of event scale-revised: Psychometric properties in a sample of motor vehicle accident survivors. *Journal of Anxiety Disorders*, 22(2), 187–198. DOI: [10.1016/j.janxdis.2007.02.007](https://doi.org/10.1016/j.janxdis.2007.02.007)
- Bercier, M. L. (2013). *Interventions that help the helpers: A systematic review and meta-analysis of interventions targeting compassion fatigue, secondary traumatic stress and vicarious traumatization in mental health workers* [Doctoral dissertation, Loyola University Chicago].
- \*Birck, A. (2002). Secondary traumatization and burnout in professionals working with torture survivors. *Traumatology*, 7(2), 85–90. DOI: [10.1177/153476560100700203](https://doi.org/10.1177/153476560100700203)
- Borenstein, M., Hedges, L., Higgins, J., & Rothstein, H. (2013). *Comprehensive Meta-Analysis*. Englewood, NJ: Biostat.
- Branson, D. C. (2019). Vicarious trauma, themes in research, and terminology: A review of literature. *Traumatology*, 25(1), 2. DOI: [10.1037/trm0000161](https://doi.org/10.1037/trm0000161)
- Bride, B., Robinson, M. M., Yegidis, B., & Figley, C. R. (2004). Development and Validation of the Secondary Traumatic Stress Scale. *Research on Social Work Practice*, 14, 27–35. DOI: [10.1177/1049731503254106](https://doi.org/10.1177/1049731503254106)
- \*Bride, B., Smith Hatcher, S., & Humble, M. N. (2009). Trauma Training, Trauma Practices, and Secondary Traumatic Stress Among Substance Abuse Counselors. *Traumatology*, 15(2), 96–105. DOI: [10.1177/1534765609336362](https://doi.org/10.1177/1534765609336362)
- British Psychological Society (2019). *Workforce wellbeing in psychological therapies. Analysis of Trends, improving our measure & taking forward the Charter*.
- British Psychological Society (2020). *Statement on clinical psychologists with lived experience of mental health difficulties*.
- \*Buchanan, M., Anderson, J. O., Uhlemann, M. R., & Horwitz, E. (2006). Secondary traumatic stress: An investigation of Canadian mental health workers. *Traumatology*, 12(4), 272–281. DOI: [10.1177/1534765606297817](https://doi.org/10.1177/1534765606297817)
- \*Carmel, M. J. S., & Friedlander, M. L. (2009). The relation of secondary traumatization to therapists' perceptions of the working alliance with clients who commit sexual abuse. *Journal of Counseling Psychology*, 56(3), 461–467. DOI: [10.1037/a0015422](https://doi.org/10.1037/a0015422)

- \*Castelli Dransart, D. A., Heeb, J. L., Gulfi, A., & Gutjahr, E. M. (2015). Stress reactions after a patient suicide and their relations to the profile of mental health professionals. *BMC Psychiatry, 15*(265). DOI: [10.1186/s12888-015-0655-y](https://doi.org/10.1186/s12888-015-0655-y)
- \*Cetrano, G., Tedeschi, F., Rabbi, L., Gosetti, G., Lora, A., Lamonaca, D., Manthorpe, J. & Amaddeo, F. (2017). How are compassion fatigue, burnout, and compassion satisfaction affected by quality of working life? Findings from a survey of mental health staff in Italy. *BMC Health Services Research, 17*(755). DOI: [10.1186/s12913-017-2726-x](https://doi.org/10.1186/s12913-017-2726-x)
- \*Cieslak, R., Anderson, V., Bock, J., Moore, B. A., Peterson, A. L., & Benight, C. C. (2013). Secondary traumatic stress among mental health providers working with the military: Prevalence and its work- and exposure-related correlates. *Journal of Nervous and Mental Disease, 201*(11), 917–925. DOI: [10.1097/NMD.0000000000000034](https://doi.org/10.1097/NMD.0000000000000034)
- Cieslak, R., Shoji, K., Douglas, A., Melville, E., Luszczynska, A., & Benight, C. C. (2014). A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. *Psychological Services, 11*, 75–86. DOI: [10.1037/a0033798](https://doi.org/10.1037/a0033798)
- \*Connally, D. (2012). The relationship between clinician sex, ethnicity, sexual identity and secondary traumatic stress. *Journal of Gay & Lesbian Mental Health, 16*(4), 306–321. DOI: [10.1080/19359705.2012.697002](https://doi.org/10.1080/19359705.2012.697002)
- Creamer, M., Bell, R., & Failla, S. (2003). Psychometric properties of the impact of event scale – revised. *Behaviour Research and Therapy, 41*, 1489–1496.
- Danieli, Y. (1988). Confronting the unimaginable: Psychotherapists' reactions to victims of the Nazi Holocaust. In J. P. Wilson, Z. Harel, & B. Kahana (Eds.), *Human adaptation to extreme stress: From the Holocaust to Vietnam* (pp. 219–238). New York: Plenum Press
- De La Rosa, G. M., Webb-Murphy, J. A., Fesperman, S. F., & Johnston, S. L. (2018). Professional quality of life normative benchmarks. *Psychological Trauma: Theory, Research, Practice, and Policy, 10*(2), 225–228. DOI: [10.1037/tra0000263](https://doi.org/10.1037/tra0000263)
- \*Diehm, R. M., Mankowitz, N. N., & King, R. M. (2019). Secondary traumatic stress in Australian psychologists: Individual risk and protective factors. *Traumatology, 25*(3), 196–202. DOI: [10.1037/trm0000181](https://doi.org/10.1037/trm0000181)
- Digiuni, M., Jones, F. W., & Camic, P. M. (2013). Perceived social stigma and attitudes towards seeking therapy in training: A cross-national study. *Psychotherapy, 50*(2), 213–223. DOI: [10.1037/a0028784](https://doi.org/10.1037/a0028784)
- Elwood, L. S., Mott, J., Lohr, J. M., & Galovski, T. E. (2011). Secondary trauma symptoms in clinicians: A critical review of the construct, specificity, and implications for trauma-focused treatment. *Clinical Psychology Review, 31*(1), 25–36. DOI: [10.1016/j.cpr.2010.12.001](https://doi.org/10.1016/j.cpr.2010.12.001)

[10.1016/j.cpr.2010.09.004](https://doi.org/10.1016/j.cpr.2010.09.004)

- Fahy, A. (2007). The Unbearable Fatigue of Compassion: Notes from a Substance Abuse Counselor Who Dreams of Working at Starbuck's. *Clinical Social Work Journal*, 35(3), 199–205. DOI: [10.1007/s10615-007-0094-4](https://doi.org/10.1007/s10615-007-0094-4)
- Figley, C. R. (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. Levittown, PA: Brunner/Mazel.
- Figley, C.R. (2002). *Treating compassion fatigue*. New York: Brunner-Routledge.
- Figley, C. R., Ellis, M. E., Reuther, B. T., & Gold, S. E. (2017). The study of trauma: A historical overview. In S. E. Gold, J. Cook, & C. J. Dalenberg (Eds.), *APA Handbook of Trauma Psychology* (pp. 1–13). DOI: [10.1037/0000019-000](https://doi.org/10.1037/0000019-000)
- Flint, S. M. (2018). Preventing vicarious trauma in counselors through the implementation of self-care practices. *Alabama Counseling Association Journal*, 42(1), 111.
- \*Furlonger, B., & Taylor, W. (2013). Supervision and the management of vicarious traumatisation among Australian telephone and online counsellors. *Australian Journal of Guidance and Counselling*, 23(1), 82–94. DOI: [10.1017/jgc.2013.3](https://doi.org/10.1017/jgc.2013.3)
- Freedman, S. A., & Freedman, S. A., & Tuval Mashiach, R. (2018). Shared trauma reality in war: Mental health therapists' experience. *PloS one*, 13(2), e0191949. DOI: [10.1371/journal.pone.0191949](https://doi.org/10.1371/journal.pone.0191949).
- Gelso, C. J., & Hayes, J. A. (2007). *Countertransference and the therapist's inner experience: Perils and possibilities*. New York, NY: Routledge.
- Geoffrion, S., Lamothe, J., Morizot, J., & Giguère, C. É. (2019). Construct Validity of the Professional Quality of Life (ProQoL) Scale in a Sample of Child Protection Workers. *Journal of Traumatic Stress*, 32(4), 566–576. DOI: [10.1002/jts.22410](https://doi.org/10.1002/jts.22410)
- Gilroy, P. J., Carroll, L., & Murra, J. (2002). A Preliminary Survey of Counseling Psychologists' Personal Experiences with Depression and Treatment. *Professional Psychology: Research and Practice*, 33(4), 402–407. DOI: [10.1037/0735-7028.33.4.402](https://doi.org/10.1037/0735-7028.33.4.402)
- González, S., & Valdez Medina, J. L. (2005). Significado psicológico de la depresión en médicos y psicólogos. *Psicología y Salud*, 15(2), 257–262.
- Grant, H. B., Lavery, C. F., & Decarlo, J. (2019). An exploratory study of police officers: Low compassion satisfaction and compassion fatigue. *Frontiers in Psychology*, 9, 2793.
- Grundlingh, H., Knight, L., Naker, D., & Devries, K. (2017). Secondary distress in violence researchers: A randomised trial of the effectiveness of group debriefings. *BMC Psychiatry*, 17, 14. DOI: [10.1186/s12888-017-1327-x](https://doi.org/10.1186/s12888-017-1327-x)

- \*Guerra, C., & Pereda, N. (2015). Estrés traumático secundario en psicólogos que atienden a niños y niñas víctimas de malos tratos y abuso sexual: Un estudio exploratorio. *Anuario de Psicología*, 45(2), 177–188.
- \*Guerra, C., Vivanco, A. F., & Morales, C. H. (2009). Efectos de una intervención cognitivo-conductual en el aumento de conductas de autocuidado y disminución del estrés traumático secundario en psicólogos clínicos. *Terapia Psicológica*, 27(1), 73–81. DOI: [10.4067/s0718-48082009000100007](https://doi.org/10.4067/s0718-48082009000100007)
- Harrison, R. L., & Westwood, M. J. (2009). Preventing vicarious traumatization of mental health therapists: Identifying protective practices. *Psychotherapy: Theory, Research, Practice, Training*, 46(2), 203–219. DOI: [10.1037/a0016081](https://doi.org/10.1037/a0016081)
- Heeb, J. L., Gutjahr, E. M., Gulfi, A., & Dransart, D. A. C. (2011). Psychometric properties of the French version of the impact of event Scale-Revised in mental health and social professionals after a patient suicide. *Swiss Journal of Psychology*, 70(2), 105–111. DOI: [10.1024/1421-0185/a000044](https://doi.org/10.1024/1421-0185/a000044)
- Hensel, J. M., Ruiz, C., Finney, C., & Dewa, C. S. (2015). Meta-Analysis of risk factors for secondary traumatic stress in therapeutic work with trauma victims. *Journal of Traumatic Stress*, 20(3), 251–262. DOI: [10.1002/jts](https://doi.org/10.1002/jts)
- Hemsworth, D., Baregheh, A., Aoun, S., & Kazanjian, A. (2018). A critical enquiry into the psychometric properties of the Professional Quality of Life scale (ProQOL-5) instrument. *Applied Nursing Research*, 39, 81–88. DOI: [10.1016/j.apnr.2017.09.006](https://doi.org/10.1016/j.apnr.2017.09.006)
- Hernández, P., Engstrom, D., & Gangsei, D. (2010). Exploring the impact of trauma on therapists: Vicarious resilience and related concepts in training. *Journal of Systemic Therapies*, 29(1), 67-83. DOI: [10.1521/jsyt.2010.29.1.67](https://doi.org/10.1521/jsyt.2010.29.1.67)
- Higgins, J., Thompson, S. G., Deeks, J. J., & Altman, D. G. (2003). Measuring inconsistency in meta-analyses. *British Medical Journal*, 327, 557–560. DOI: [10.1136/bmj.327.7414.557](https://doi.org/10.1136/bmj.327.7414.557)
- Hodge Jr, S. D., & Williams, L. (2020). Vicarious Trauma: A growing problem among legal professionals that may become a more prevalent cause of action. *Texas Tech Law Review*, 53, 511.
- Horowitz, M. J., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. *Psychosomatic Medicine*, 41, 209–218. DOI: [10.1097/00006842-197905000-00004](https://doi.org/10.1097/00006842-197905000-00004)
- \*Jacobson, J. M. (2006). Compassion fatigue, compassion satisfaction, and burnout: Reactions among employee assistance professionals providing workplace crisis intervention and disaster management services. *Workplace Disaster Preparedness, Response, and Management*, 21(3–4), 133–152. DOI: [10.1300/J490v21n03\\_08](https://doi.org/10.1300/J490v21n03_08)

- \*Jacobson, J. M. (2012). Risk of Compassion Fatigue and Burnout and Potential for Compassion Satisfaction among employee assistance professionals: Protecting the workforce. *Traumatology*, 18(3), 64–72. DOI: [10.1177/1534765611431833](https://doi.org/10.1177/1534765611431833)
- Janoff-Bulman, R., & McPherson, C. (1997). The impact of trauma on meaning: From meaningless world to meaningful life. In M. Power & C. R. Brewin (Eds.), *The Transformation of Meaning in Psychological Therapies* (pp. 91–106). John Wiley & Sons.
- Jenkins, B., & Warren, N. A. (2012). Concept analysis: Compassion fatigue and effects upon critical care nurses. *Critical Care Nursing Quarterly*, 35(4), 388–395. DOI: [10.1097/CNQ.0b013e318268fe09](https://doi.org/10.1097/CNQ.0b013e318268fe09)
- Joinson, C. (1992). Coping with compassion fatigue. *Nursing*, 22(4), 116–120. DOI: [10.1097/00152193-199204000-00035](https://doi.org/10.1097/00152193-199204000-00035)
- Kadambi, M. A., & Ennis, L. (2004). Reconsidering vicarious trauma. A review of the literature and its' limitations. *Journal of Trauma Practice*, 3(2), 1–21. DOI: [10.1300/J189v05n01\\_01](https://doi.org/10.1300/J189v05n01_01)
- \*Kadambi, M. A., & Truscott, D. (2003). Vicarious traumatization and burnout among therapists working with sex offenders. *Traumatology*, 9(4), 216–230. DOI: [10.1528/trau.9.4.216.25265](https://doi.org/10.1528/trau.9.4.216.25265)
- \*Kadambi, M. A., & Truscott, D. (2004). Vicarious trauma among therapists working with sexual violence, cancer and general practice. *Canadian Journal of Counselling*, 38(4), 260–276.
- Kaur, S. (2017). “You cannot pour from an empty container”: The impact of working with trauma survivors on mental health professionals. [Doctoral dissertation, University of Leicester]. Retrieved from <https://hdl.handle.net/2381/40493>
- Kern, E. O. (2014). The pathologized counselor: Effectively integrating vulnerability and professional identity. *Journal of Creativity in Mental Health*, 9(2), 304–316. DOI: [10.1080/15401383.2013.854189](https://doi.org/10.1080/15401383.2013.854189)
- \*Kiley, K. A., Sehgal, A. R., Neth, S., Dolata, J., Pike, E., Spilsbury, J. C., & Albert, J. M. (2018). The effectiveness of guided imagery in treating compassion fatigue and anxiety of mental health workers. *Social Work Research*, 42(1), 33–43. DOI: [10.1093/swr/svx026](https://doi.org/10.1093/swr/svx026)
- Kim, S. J., & Yeo, J. H. (2020). Factors affecting posttraumatic stress disorder in South Korean trauma nurses. *Journal of Trauma Nursing*, 27(1), 50–57.
- Kim, J., Chesworth, B., Franchino-Olsen, H., & Macy, R. J. (2021). A scoping review of vicarious trauma interventions for service providers working with people who have experienced traumatic events. *Trauma, Violence, & Abuse*. DOI: [10.1177/1524838021991310](https://doi.org/10.1177/1524838021991310)

- \*Kintzle, S., Yarvis, J. S., & Bride, B. (2013). Secondary traumatic stress in military primary and mental health care providers. *Military Medicine*, 178(12), 1310–1315. DOI: [10.7205/milmed-d-13-00087](https://doi.org/10.7205/milmed-d-13-00087)
- \*Kjellenberg, E., Nilsson, F., Daukantaitė, D., & Cardena, E. (2014). Transformative narratives: The impact of working with war and torture survivors. *Psychological Trauma: Theory, Research, Practice, and Policy*, 6(2), 120–128. DOI: [10.1037/a0031966](https://doi.org/10.1037/a0031966)
- Kleespies, P. M., Van Orden, K. A., Bongar, B., Bridgeman, D., Bufka, L. F., Galper, D. I., Hillbrand, M., & Yufit, R. I. (2011). Psychologist Suicide: Incidence, impact, and suggestions for prevention, intervention, and postvention. *Professional Psychology: Research and Practice*, 42(3), 244–251. DOI: [10.1037/a0022805](https://doi.org/10.1037/a0022805)
- \*La Mott, J., & Martin, L. A. (2019). Adverse childhood experiences, self-care, and compassion outcomes in mental health providers working with trauma. *Journal of Clinical Psychology*, 75(6), 1066–1083. DOI: [10.1002/jclp.22752](https://doi.org/10.1002/jclp.22752)
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33(1), 159–174. DOI: [10.2307/2529310](https://doi.org/10.2307/2529310)
- \*Laverdière, O., Kealy, D., Ogrodniczuk, J. S., Chamberland, S., & Descôteaux, J. (2019). Psychotherapists' professional quality of life. *Traumatology*, 25(3), 208–215. DOI: [10.1037/trm0000177](https://doi.org/10.1037/trm0000177)
- \*Lawson, G., & Myers, J. (2011). Wellness, professional quality of life, and career-sustaining behaviors: What keeps Us well? *Journal of Counseling and Development*, 89(2), 163–171. DOI: [10.1002/j.1556-6678.2011.tb00074.x](https://doi.org/10.1002/j.1556-6678.2011.tb00074.x)
- Lee, H. G., & Kim, J. S. (2020). Influence of secondary trauma stress, and vocation on turnover intention of nurses in regional trauma centers. *Journal of Korean Academy of Nursing Administration*, 26(1), 65-72.
- Lewis, S. J., Arseneault, L., Caspi, A., Fisher, H. L., Matthews, T., Moffitt, T. E., Odgers, C. L., Stahl, D., Teng, J. Y., & Danese, A. (2019). The epidemiology of trauma and post-traumatic stress disorder in a representative cohort of young people in England and Wales. *The Lancet Psychiatry*, 6(3), 247–256. DOI: [10.1016/S2215-0366\(19\)30031-8](https://doi.org/10.1016/S2215-0366(19)30031-8)
- \*Linley, P. A., & Joseph, S. (2007). Therapy work and therapists' positive and negative well-being. *Journal of Social and Clinical Psychology*, 26(3), 385–403. DOI: [10.1521/jscp.2007.26.3.385](https://doi.org/10.1521/jscp.2007.26.3.385)
- Măirean, C. (2016). Secondary traumatic stress and posttraumatic growth: Social support as a moderator. *Social Science Journal*, 53(1), 14–21. DOI: [10.1016/j.soscij.2015.11.007](https://doi.org/10.1016/j.soscij.2015.11.007)
- \*Makadia, R., Sabin-Farrell, R., & Turpin, G. (2017). Indirect exposure to client trauma and the impact on trainee clinical psychologists: Secondary traumatic stress or vicarious

- traumatization? *Clinical Psychology and Psychotherapy*, 24(5), 1059–1068. DOI: [10.1002/cpp.2068](https://doi.org/10.1002/cpp.2068)
- Manning-Jones, S., de Terte, I., & Stephens, C. (2017). The relationship between vicarious posttraumatic growth and secondary traumatic stress among health professionals. *Journal of Loss and Trauma*, 22(3), 256–270.
- McCann, L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress*, 3(1), 131–149. DOI: [10.1007/BF00975140](https://doi.org/10.1007/BF00975140)
- McCann, L., & Pearlman, L. A. (1992). Constructivist self-development theory: A theoretical framework for assessing and treating traumatized college students. *Journal of the American College Health Association*, 40(4), 189–196. DOI: [10.1080/07448481.1992.9936281](https://doi.org/10.1080/07448481.1992.9936281)
- Mccormack, H. M., Macintyre, T. E., Shea, D. O., Herring, M. P., & Campbell, M. J. (2018). The Prevalence and Cause (s) of Burnout Among Applied Psychologists: A Systematic Review. *Frontiers in Psychology*, 9. DOI: [10.3389/fpsyg.2018.01897](https://doi.org/10.3389/fpsyg.2018.01897)
- \*McKim, L. L., & Smith-Adcock, S. (2014). Trauma Counsellors' Quality of Life. *International Journal for the Advancement of Counselling*, 36(1), 58–69. DOI: [10.1007/s10447-013-9190-z](https://doi.org/10.1007/s10447-013-9190-z)
- \*McLean, S., Wade, T. D., & Encel, J. S. (2003). The contribution of therapist beliefs to psychological distress in therapists: An investigation of vicarious traumatization, burnout and symptoms of avoidance and intrusion. *Behavioural and Cognitive Psychotherapy*, 31(4), 417–428. DOI: [10.1017/S135246580300403X](https://doi.org/10.1017/S135246580300403X)
- Michalchuk, S., & Martin, S. L. (2019). Vicarious resilience and growth in psychologists who work with trauma survivors: An interpretive phenomenological analysis. *Professional Psychology: Research and Practice*, 50(3), 145–154. DOI: [10.1037/pro0000212](https://doi.org/10.1037/pro0000212)
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *Annals of Internal Medicine*, 151, 264–269.
- Moran, R. J., & Asquith, N. L. (2020). Understanding the vicarious trauma and emotional labour of criminological research. *Methodological Innovations*, 13(2). DOI: [10.1177/2059799120926085](https://doi.org/10.1177/2059799120926085)
- Mordeno, I. G., Go, G. P., & Yangson-Serondo, A. (2017). Examining the dimensional structure models of secondary traumatic stress based on DSM-5 symptoms. *Asian Journal of Psychiatry*, 25(1), 154–160. DOI: [10.1016/j.ajp.2016.10.024](https://doi.org/10.1016/j.ajp.2016.10.024)
- Munyoro, A., & Mavhungu, C. (2021). Mental health and historical trauma among social workers

- working with victims of violent crime in South Africa. *Journal of Human Behavior in the Social Environment*, 1-17. DOI: [10.1080/10911359.2021.1896408](https://doi.org/10.1080/10911359.2021.1896408)
- Najjar, N., Davis, L. W., Beck-Coon, K., Doebbeling, C. C., & Doebbeling, C. (2009). Compassion fatigue: A review of the research to date and relevance to cancer-care providers. *Journal of Health Psychology*, 14(2), 267–277. DOI: [10.1177/1359105308100211](https://doi.org/10.1177/1359105308100211)
- \*Newell, J. M., & MacNeil, G. A. (2011). A comparative analysis of burnout and professional quality of life in clinical mental health providers and health care administrators. *Journal of Workplace Behavioral Health*, 26(1), 25–43. DOI: [10.1080/15555240.2011.540978](https://doi.org/10.1080/15555240.2011.540978)
- \*Newman, C., Eason, M., & Kinghorn, G. (2019). Incidence of vicarious trauma in correctional health and forensic mental health staff in New South Wales, Australia. *Journal of Forensic Nursing*, 15(3), 183–192. DOI: [10.1097/JFN.0000000000000245](https://doi.org/10.1097/JFN.0000000000000245)
- \*Newmeyer, M., Keyes, B., Palmer, K., Kent, V., Spong, S., Stephen, F., & Troy, M. (2016). Spirituality and religion as mitigating factors in compassion fatigue among trauma therapists in Romania. *Journal of Psychology & Theology*, 44(2), 142–151. DOI: [10.1177/009164711604400205](https://doi.org/10.1177/009164711604400205)
- Nimmo, A. & Huggard, P. (2013). A systematic review of the measurement of compassion fatigue, vicarious trauma and secondary traumatic stress in physicians. *Australasian Journal of Disaster and Trauma Studies*, 1, 37–44.
- Nuttman-Shwartz, O. (2019). Behavioral responses in youth exposed to natural disasters and political conflict. *Current Psychiatry Reports*, 21(6), 1–9.
- Nuttman-Shwartz, O. (2015). Shared Resilience in a Traumatic Reality: A new concept for trauma workers exposed personally and professionally to collective disaster. *Trauma, Violence, & Abuse*, 16(4), 466–475. DOI: [10.1177/1524838014557287](https://doi.org/10.1177/1524838014557287)
- \*Nyagaya, L., Chepchieng, M., Njunge, T., & Ombura, J. (2014). Secondary traumatic stress among psychotherapists: An empirical comparative analysis of prevalence rates and management in Nakuru and Nairobi counties of Kenya. *Kenya Journal of Educational Planning, Economics & Management*, 8(2). DOI: [10.1177/008124631004000204](https://doi.org/10.1177/008124631004000204)
- \*Olivares, R. B., Morales Messerer, G., Rodríguez, K., & Guerra, C. (2007). La frecuencia de emisión de conductas de autocuidado y su relación con los niveles de estrés traumático secundario y de depresión en psicólogos clínicos. *Pensamiento Psicológico*, 3(9), 9–19.
- Osofsky, J. D., Putnam, F. W., & Lederman, J. C. S. (2008). How to maintain emotional health when working with trauma. *Juvenile and Family Court Journal*, 59(4), 91–102. <https://doi.org/10.1111/j.1755-6988.2008.00023.x>
- Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan---a web and



- mobile app for systematic reviews. *Systematic Reviews*, 5(1), 210. DOI: [10.1186/s13643-016-0384-4](https://doi.org/10.1186/s13643-016-0384-4)
- Pakenham, K. I., & Stafford-Brown, J. (2012). Stress in clinical psychology trainees: Current research status and future directions. *Australian Psychologist*, 47, 147–155. DOI: [10.1111/j.1742-9544.2012.00070.x](https://doi.org/10.1111/j.1742-9544.2012.00070.x)
- Pearlman, L. A. (1996). Psychometric review of the TSI Belief Scale, Revision-L. In B. H. Stamm (Ed.), *Measurement of stress, trauma, and adaptation* (pp. 415–418). Lutherville, MD: Sidran Press.
- Pearlman, L. A. (2003). *Trauma and Attachment Belief Scale*. Los Angeles, CA: Western Psychological Services.
- \*Pearlman, L. A., & MacIan, P. S. (1995). Vicarious Traumatization: An empirical study of the effects of trauma work on trauma therapists. *Professional Psychology: Research and Practice*, 26(6), 558–565. DOI: [10.1037/0735-7028.26.6.558](https://doi.org/10.1037/0735-7028.26.6.558)
- Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors*. New York, NY: W.W. Norton.
- Pérez-Chacón, M., Chacón, A., Borda-Mas, M., & Avargues-Navarro, M. L. (2021). Sensory processing sensitivity and compassion satisfaction as risk/protective factors from burnout and compassion fatigue in healthcare and education professionals. *International Journal of Environmental Research and Public Health*, 18(2), 611. DOI: [10.3390/ijerph18020611](https://doi.org/10.3390/ijerph18020611)
- Pope, K. S., & Feldman-Summers, S. (1992). National survey of psychologists' sexual and physical abuse history and their evaluation of training and competence in these areas. *Professional Psychology: Research and Practice*, 23(5), 353–361. DOI: [10.1037/0735-7028.23.5.353](https://doi.org/10.1037/0735-7028.23.5.353)
- Pope, K. S., & Tabachnick, B. G. (1994). Therapists as patients: A national survey of psychologists' experiences, problems, and beliefs. *Professional Psychology: Research and Practice*, 25(3), 247–258. DOI: [10.1037/0735-7028.25.3.247](https://doi.org/10.1037/0735-7028.25.3.247)
- \*Posselt, M., Deans, C., Baker, A., & Procter, N. (2019). Clinician wellbeing: The impact of supporting refugee and asylum seeker survivors of torture and trauma in the Australian context. *Australian Psychologist*, 54(5), 415–426. DOI: [10.1111/ap.12397](https://doi.org/10.1111/ap.12397)
- Răbu, M., Moltu, C., Binder, P. E., & McLeod, J. (2016). How does practicing psychotherapy affect the personal life of the therapist? A qualitative inquiry of senior therapists' experiences. *Psychotherapy Research*, 26(6), 737–749. DOI: [10.1080/10503307.2015.1065354](https://doi.org/10.1080/10503307.2015.1065354)
- \*Ray, S. L., Wong, C., White, D., & Heaslip, K. (2013). Compassion Satisfaction, Compassion

- Fatigue, work life conditions, and burnout among frontline mental health care professionals. *Traumatology*, 19(4), 255–267. DOI: [10.1177/1534765612471144](https://doi.org/10.1177/1534765612471144)
- \*Rayner, S., Davis, C., Moore, M., & Cadet, T. (2020). Secondary traumatic stress and related factors in Australian social workers and psychologists. *Health & Social Work*, 45(2), 122–130. DOI: [10.1093/hsw/hlaa001](https://doi.org/10.1093/hsw/hlaa001)
- Reyes, G., Elhai, J. D., & Ford, J. D. (2008). *The encyclopedia of psychological trauma*. New Jersey: Wiley.
- Rhee, Y., Ko, Y., & Han, I. (2013). Posttraumatic growth and related factors of child protective service workers. *Annals of Occupational and Environmental Medicine*, 25(1):6. DOI: [10.1186/2052-4374-25-6](https://doi.org/10.1186/2052-4374-25-6)
- \*Robinson-Keilig, R. A. (2014). Secondary traumatic stress and disruptions to interpersonal functioning among mental health therapists. *Journal of Interpersonal Violence*, 29(8), 1477–1496. DOI: [10.1177/0886260513507135](https://doi.org/10.1177/0886260513507135)
- \*Rossi, A., Cetrano, G., Pertile, R., Rabbi, L., Donisi, V., Grigoletti, L., Curtolo, C., Tansella, M., Thornicroft, G., & Amadeo, F. (2012). Burnout, compassion fatigue, and compassion satisfaction among staff in community-based mental health services. *Psychiatry Research*, 200(2–3), 933–938. DOI: [10.1016/j.psychres.2012.07.02](https://doi.org/10.1016/j.psychres.2012.07.02)
- Saakvitne, K. W., Tennen, H., & Affleck, G. (1998). Exploring thriving in the context of clinical trauma theory: Constructivist self development theory. *Journal of Social Issues*, 54(2), 279–299. DOI: [10.1111/0022-4537.661998066](https://doi.org/10.1111/0022-4537.661998066)
- Sabin-Farrell, R., & Turpin, G. (2003). Vicarious traumatization: Implications for the mental health of health workers? *Clinical Psychology Review*, 23(3), 449–480. DOI: [10.1016/S0272-7358\(03\)00030-8](https://doi.org/10.1016/S0272-7358(03)00030-8)
- \*Samios, C., Rodzik, A. K., & Abel, L. M. (2012). Secondary traumatic stress and adjustment in therapists who work with sexual violence survivors: the moderating role of posttraumatic growth. *British Journal of Guidance & Counselling*, 40(4), 341–356. DOI: [10.1080/03069885.2012.691463](https://doi.org/10.1080/03069885.2012.691463)
- Sawyer, A. (2011). Let's talk: A narrative of mental illness, recovery, and the psychotherapist's personal treatment. *Journal of Clinical Psychology*. DOI: [10.1002/jclp.20822](https://doi.org/10.1002/jclp.20822)
- Schilling, E. J., Randolph, M., & Boan-Lenzo, C. (2018). Job burnout in school psychology: How big is the problem?. *Contemporary School Psychology*, 22(3), 324-331.
- Scott, Z., O'Curry, S., & Mastroyannopoulou, K. (2021). The impact and experience of debriefing for clinical staff following traumatic events in clinical settings: A systematic review. *Journal of Traumatic Stress*. DOI: [10.1002/jts.22736](https://doi.org/10.1002/jts.22736)
- Sexton, L. (1999). Vicarious traumatization of counsellors and effects on their workplaces.

- British Journal of Guidance & Counselling*, 27(3), 393–403. DOI: [10.1080/03069889908256279](https://doi.org/10.1080/03069889908256279)
- Simon, C. E., Pryce, J. G., Roff, L. L., & Klemmack, D. (2005). Secondary traumatic stress and oncology social work: protecting compassion from fatigue and compromising the worker's worldview. *Journal of Psychosocial Oncology*, 23(4), 1–14. DOI: [10.1300/j077v23n04\\_01](https://doi.org/10.1300/j077v23n04_01)
- Singer, J., Cummings, C., Moody, S. A., & Benuto, L. T. (2020). Reducing burnout, vicarious trauma, and secondary traumatic stress through investigating purpose in life in social workers. *Journal of Social Work*, 20(5), 620–638.
- \*Somoray, K., Shakespeare-Finch, J., & Armstrong, D. (2016). The impact of personality and workplace belongingness on mental health workers' professional quality of life. *Australian Psychologist*, 52(1), 52–60. DOI: [10.1111/ap.12182](https://doi.org/10.1111/ap.12182)
- \*Sprang, G., Clark, J. J., & Whitt-Woosley, A. (2007). Compassion fatigue, compassion satisfaction, and burnout: Factors impacting a professional's quality of life. *Journal of Loss and Trauma*, 12(3), 259–280. DOI: [10.1080/15325020701238093](https://doi.org/10.1080/15325020701238093)
- Sprang, G., Ford, J. D., Kerig, P. K., & Bride, B. (2019). Defining secondary traumatic stress and developing targeted assessments and interventions: Lessons learned from research and leading experts. *Traumatology*, 25(2), 72–81. DOI: [10.1037/trm0000180](https://doi.org/10.1037/trm0000180)
- Stamm, B. H. (2002). Measuring compassion satisfaction as well as fatigue: Developmental history of the Compassion Satisfaction and Fatigue Test. In C. R. Figley (Ed.), *Psychosocial stress series, no. 24. Treating compassion fatigue* (p. 107–119). Brunner-Routledge.
- Stamm, B. H. (2005). *The Pro-QOL Manual: The Professional Quality of Life Scale: Compassion Satisfaction, Burnout & Compassion Fatigue/Secondary Trauma Scales*. Baltimore, MD: Sidran Press. Retrieved from <http://compassionfatigue.org/pages/ProQOLManualOct05.pdf>
- Stamm, B. H. (2010). *The Concise ProQOL Manual* 2nd Ed. Pocatello. Retrieved from <https://proqol.org/uploads/ProQOLManual.pdf>
- Sweileh, W.M. (2020) Research trends and scientific analysis of publications on burnout and compassion fatigue among healthcare providers. *Journal of Occupational Medicine and Toxicology*, 15(23). DOI: [10.1186/s12995-020-00274-z](https://doi.org/10.1186/s12995-020-00274-z)
- Tang, C., Goldsamt, L., Meng, J., Xiao, X., Zhang, L., Williams, A. B., & Wang, H. (2020). Global estimate of the prevalence of post-traumatic stress disorder among adults living with HIV: A systematic review and meta-Analysis. *BMJ Open*, Article number 10:10:e032435. DOI: [10.1136/bmjopen-2019-032435](https://doi.org/10.1136/bmjopen-2019-032435)

- Taylor, W., & Furlonger, B. (2011). A review of vicarious traumatization and supervision among Australian telephone and online counsellors. *Journal of Psychologists and Counsellors in Schools, 21*(2), 225-235.
- Tedeschi, R. G., & Calhoun, L. (2004). Posttraumatic growth: A new perspective on psychotraumatology. *Psychiatric Times, 21*(4), 58–60.
- \*Thompson, I. A., Amatea, E. S., & Thompson, E. S. (2014). Personal and contextual predictors of mental health counselors' compassion fatigue and burnout. *Journal of Mental Health Counseling, 36*(1), 58–77. DOI: [10.17744/mehc.36.1.p61m73373m4617r3](https://doi.org/10.17744/mehc.36.1.p61m73373m4617r3)
- Thoresen, S., Tambs, K., Hussain, A., Heir, T., Johansen, V. A., & Bisson, J. I. (2010). Brief measure of posttraumatic stress reactions: Impact of Event Scale-6. *Social Psychiatry and Psychiatric Epidemiology, 45*(3), 405–412.
- \*Tominaga, Y., Goto, T., Shelby, J., Oshio, A., Nishi, D., & Takahashi, S. (2019). Secondary trauma and posttraumatic growth among mental health clinicians involved in disaster relief activities following the 2011 Tohoku earthquake and tsunami in Japan. *Counselling Psychology Quarterly, 33*(4), 427–447. DOI: [10.1080/09515070.2019.1639493](https://doi.org/10.1080/09515070.2019.1639493)
- Tosone, C., Nuttman-Shwartz, O., & Stephens, T. (2012). Shared trauma: When the professional is personal. *Clinical Social Work Journal, 40*(2). DOI: [10.1007/s10615-012-0395-0](https://doi.org/10.1007/s10615-012-0395-0)
- \*Trippany, R. L., Kress, V. E. W., & Wilcoxon, S. A. (2004). Preventing vicarious trauma: what counselors should know when working with trauma survivors. *Journal of Counseling and Development, 82*(1), 31–37. DOI: [10.1002/j.1556-6678.2004.tb00283.x](https://doi.org/10.1002/j.1556-6678.2004.tb00283.x)
- van Minnen, A., & Keijsers, G. P. J. (2000). A controlled study into the (cognitive) effects of exposure treatment on trauma therapists. *Journal of Behavior Therapy and Experimental Psychiatry, 31*(3–4), 189–200. DOI: [10.1016/S0005-7916\(01\)00005-2](https://doi.org/10.1016/S0005-7916(01)00005-2)
- \*Way, I., VanDeusen, K. M., Martin, G., Applegate, B., & Jandle, D. (2004). Vicarious trauma: a comparison of clinicians who treat survivors of sexual abuse and sexual offenders. *Journal of Interpersonal Violence, 19*(1), 49–71. DOI: [10.1177/0886260503259050](https://doi.org/10.1177/0886260503259050)
- Weiss, D. S., & Marmar, C. (1997). The Impact of Event Scale-Revised. In J. P. Wilson & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD* (pp. 399–411). New York, NY: The Guilford Press.
- Wells, G., Shea, B., O'Connell, D., & Peterson, J. (2000). *The Newcastle-Ottawa Scale (NOS) for assessing the quality of nonrandomised studies in meta-analyses*. Retrieved from [http://www.ohri.ca/programs/clinical\\_epidemiology/oxford.asp](http://www.ohri.ca/programs/clinical_epidemiology/oxford.asp)
- \*Williams, A. B., Helm, H. M., & Clemens, E. V. (2012). The effect of childhood trauma, personal wellness, supervisory working alliance, and organizational factors on vicarious traumatization. *Journal of Mental Health Counseling, 34*(2), 133–153. DOI:

[10.1080/10508421003595968](https://doi.org/10.1080/10508421003595968)

- Woodward, L. E., Murrell, S. A., & Bettler, R. F. (2005). Empathy and interpersonal style: A mediational model of secondary traumatic stress symptomology following 9/11. *Journal of Aggression, Maltreatment & Trauma, 11*(4), 1–28. DOI: [10.1300/J146v11n04\\_01](https://doi.org/10.1300/J146v11n04_01)
- \*Zeidner, M., Hadar, D., Matthews, G., & Roberts, R. D. (2013). Personal factors related to compassion fatigue in health professionals. *Anxiety, Stress, and Coping, 26*(6), 595–609. DOI: [10.1080/10615806.2013.777045](https://doi.org/10.1080/10615806.2013.777045)
- \*Želeskov-Đorić, J., Hedrih, V., & Đorić, P. (2012). Relations of resilience and personal meaning with vicarious traumatization in psychotherapists. *International Journal of Psychotherapy, 16*(3), 44–55.
- Zerubavel, N., & Wright, M. O. D. (2012). The dilemma of the wounded healer. *Psychotherapy, 49*(4), 482–491. DOI: [10.1037/a0027824](https://doi.org/10.1037/a0027824)