

Secondary Traumatic Stress and Vicarious Trauma: A Validation Study¹

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Vicarious trauma (VT) and secondary traumatic stress (STS) or compassion fatigue both describe effects of working with traumatized persons on therapists. Despite conceptual similarities, their emphases differ: cognitive schemas vs. posttraumatic symptoms and burnout, respectively. The TSI Belief Scale (TSI-BSL) measures VT; the Compassion Fatigue Self-Test (CFST) for Psychotherapists measures STS. Neither has substantial psychometric evidence yet, nor has their association been studied. Results for 99 sexual assault and domestic violence counselors show concurrent validity between TSI-BSL and CFST, moderate convergence with burnout but useful discrimination, and strong convergence with general distress, but adequate independent shared variance. Counselors with interpersonal trauma histories scored higher on CFST, but not TSI-BSL or burnout, consistent with the CFST's emphasis on trauma symptomatology.

KEY WORDS: secondary traumatic stress; vicarious trauma; compassion fatigue; burnout; countertransference.

Introduction

Secondary traumatic stress (STS; also called “compassion fatigue”) and vicarious traumatization are conceptualized as reactions to the emotional demands on therapists and social network members from exposure to trauma survivors’ terrifying, horrifying, and shocking images; strong, chaotic affect; and intrusive traumatic memories (reviewed in Figley, 1995a; Pearlman, 1995; Sexton, 1999; Stamm, 1995). This study examines the associations among measures of these

trauma-related constructs in a sample of sexual assault and domestic violence counselors, comparing these measures with each other and with measures of burnout and general distress to evaluate the concurrent and discriminant validity of the two trauma-related measures. The more established construct of burnout was chosen for comparison because it is conceptually related, being also a form of occupational stress response among human service professionals, including counselors and psychotherapists.

To support their construct validity, measures of STS and vicarious trauma (VT) should be moderately correlated with burnout and general distress; to show discriminant (and potential incremental) validity, these correlations should not be so high as to indicate redundancy. Furthermore, concurrent validity supportive of construct validity requires the trauma-related measures to be correlated with each other more highly than either is with burnout or general distress, but not so highly as to indicate redundancy; unique variance should be adequate to support differential association with a criterion.

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Secondary Traumatic Stress/Compassion Fatigue⁴

STS describes the sudden adverse reactions people can have to trauma survivors whom they are helping or wanting to help. Figley (1983) first defined secondary trauma as the emotional duress experienced by persons having close contact with a trauma survivor, especially concerned family members, a natural response to a survivor's traumatic material with which helpers may identify and empathize (Figley & Kleber, 1995). The symptoms of secondary trauma are nearly identical to PTSD symptoms; the main difference is that the traumatized person may develop PTSD, whereas the one hearing about the trauma may develop STS disorder. Figley now has renamed it compassion fatigue, seeing it as a normative occupational hazard for trauma workers and mental health professionals and explaining that this term is preferred because it is less stigmatizing (Figley, 1995a). A burnout aspect was more recently incorporated into the theoretical base to capture the energy depletion characteristic of secondary trauma that represents the exhaustion of providing ongoing support to the chronically affected primary victim (Figley & Kleber, 1995). It is currently unclear whether the resulting construct is unitary or composed of two distinct content domains (Figley & Stamm, 1996).

Figley (1995a) described three content domains of symptoms: (1) reexperiencing of the primary survivor's traumatic event; (2) avoidance of reminders and/or numbing in response to reminders; and (3) persistent arousal. To define the content domain for burnout, Figley used Kahill's five categories of symptoms (physical, emotional, behavioral, work-related, and interpersonal; Kahill, 1988) rather than Maslach's better known three (Maslach, 1982). Kahill's broader content domains are less specific to burnout, chiefly a range of work-related and psychosomatic symptoms that Maslach considers to be sequelae of burnout.

Figley developed the Compassion Fatigue Self-Test (CFST) for Psychotherapists, which has two subscales assessing PTSD-like symptoms (CFST-CF, for compassion fatigue) and burnout (CFST-BO; Figley, 1995a). Despite the wide application of the CFST, there is little published empirical research. Scores have been related to greater secondary trauma vulnerability for therapists with trauma histories (Good, 1996) and to level of education and training (Good, 1996; Rudolph, Stamm, & Stamm, 1997).

⁴To avoid confusion with the names of measures, this construct will be referred to hereafter as "secondary trauma."

Vicarious Traumatization

VT is salient for therapists who help victims of violence, particularly sexual assault and incest survivors. Using constructivist self-development theory, Pearlman and Saakvitne (1995) defined VT as the permanent "transformation in the inner experience of the therapist that comes about as a result of empathic engagement with clients' trauma material" (Pearlman & Saakvitne, 1995, p. 31). The main symptoms of VT are disturbances in the therapist's cognitive frame of reference, "identity, world view, and spirituality... affect tolerance, fundamental psychological needs, deeply held beliefs about self and others, interpersonal relationships, internal imagery, and... physical presence in the world" (Pearlman & Saakvitne, 1995, p. 280). Verbal exposure to traumatic material theoretically changes cognitive schemas regarding both self and others in five key areas representing major psychological needs relevant to trauma: trust, safety, control, esteem, and intimacy (Pearlman & Saakvitne, 1995). Intrusive imagery and other PTSD symptoms also appear as disruptions to the therapist's imagery system of memory, yielding painful experiences of images and emotions associated with the client's traumatic memories. These effects may be profound and long-lasting (McCann & Pearlman, 1990a).

The TSI Belief Scale, Revision L (TSI-BSL; Pearlman, 1996a) measures disruptions in the five need/schema areas for self and others, yielding a total score and 10 subscales (Pearlman, 1996a). Cunningham (1996), Lee (1995), and Pearlman and Mac Ian (1995) found higher TSI-BSL scores among trauma therapists with personal trauma histories, but Schauben and Frazier (1995), Green (1996), and Simonds (1997) did not.

Burnout

The construct of burnout is far better developed both in theory and in measure validation than are the two trauma-related constructs. It was first used by psychologists in the occupational stress literature to describe emotional consequences specific to "people work" for human service workers and mental health professionals who work intensely with other people's problems (reviewed in Maslach, 1976, 1982, 1987). Burnout is conceptualized as a defensive response to prolonged occupational exposure to demanding interpersonal situations that produce psychological strain and provide inadequate support.

Maslach (1982) provided the most widely used construct definition of burnout as containing three content

domains:

a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do people-work of some kind . . . response to the chronic emotional strain of dealing extensively with other human beings, particularly when they are troubled or having problems. . . . A pattern of emotional overload and subsequent emotional exhaustion is at the heart of the burnout syndrome. A person gets overly involved emotionally, overextends himself or herself, and feels overwhelmed by the emotional demands imposed by other people. (p. 3)

The initial overinvolvement and emotional exhaustion then leads to withdrawal into depersonalization of clients and poor service delivery which, along with problematic workplace conditions such as work overload and lack of social support, may reduce job satisfaction from personal accomplishment by producing feelings of inadequacy toward the job and clients and a sense of failure that lowers self-esteem (Maslach, 1982). High levels of subjective personal accomplishment sustained by adequate structural supports may allow workers to tolerate moderate levels of emotional exhaustion without needing to distance themselves from clients. Farber (1985) reported that therapists who work in institutions, rather than private practice, are more at risk for burnout, implying that the job structure is often predictive of burnout. When the workplace does not provide adequate social support for healthy coping, workers may resort to apathetic detachment, cynicism, or rigidity (reviewed in Cherniss, 1980).

The Maslach Burnout Inventory (MBI) is widely accepted as the best validated measure of burnout (Maslach & Jackson, 1981). The MBI contains three subscales assessing Emotional Exhaustion (EE), Depersonalization (DP), and (reduced) Personal Accomplishment (PA). The Emotional Exhaustion subscale describes states of emotional exhaustion and overextension due to work demands. The Depersonalization subscale describes impersonal, unfeeling responses toward care or service recipients. The Personal Accomplishment subscale (reversed in scoring) taps positive feelings such as competence in helping people and successful achievement.

Comparing Secondary Trauma, Vicarious Trauma, and Burnout

Secondary trauma, VT, and burnout are similar in resulting from exposure to emotionally engaging clients via interpersonally demanding jobs, and represent debilitation that can obstruct providers' services. Thus,

some shared variance over and above common method variance is expected because of empathic ability as a theoretical vulnerability factor, interpersonal demands as a stressor, and resulting psychological distress. A finding of moderate overlap with burnout thus supports the construct validity of both secondary trauma and VT. However, they should be no more than moderately related because of the theoretically different impact of trauma exposure compared to workplace structural strains. Burnout is related to chronic tedium in the workplace rather than exposure to specific kinds of client problems such as trauma (Schauben & Frazier, 1995), and secondary trauma and VT have not been linked to workplace conditions.

Although both trauma-related constructs stem from contact with trauma survivors, and both include a similar component of residual PTSD-like symptoms that suggests a moderate-to-high correlation between them, VT and secondary traumatic stress also differ on four main dimensions: (1) focus on symptomatology versus theory, (2) nature of symptoms (observable reactions vs. more covert changes in thinking), (3) relevant populations, and (4) critical amount of exposure to trauma survivors. Figley (1995a) focuses on observed PTSD symptomatology; McCann and Pearlman (1990a) and Pearlman and Saakvitne (1995) emphasize the theoretical underpinnings of VT as a process of self-perceived change using constructivist self-development theory. Although Figley acknowledges trauma-related cognitive shifts, PTSD symptoms with rapid onset are central; McCann and Pearlman (1990a) discuss tangible PTSD symptoms but emphasize their content rather than intensity in the context of profound belief system changes, whereas secondary trauma gives less attention to context and etiology (Pearlman & Saakvitne, 1995). Figley (1983) initially identified secondary trauma in sexual assault survivors' and combat veterans' significant others. The concept was recently expanded to apply to professionals (police officers, nurses, and trauma therapists) who provide direct services to sexual assault (and other trauma) survivors (Figley, 1995b); McCann and Pearlman (1990a, 1990b) and Pearlman and Saakvitne (1995) have focused on mental health professionals, chiefly those who work with survivors of incest and childhood sexual abuse. Finally, Figley asserted that one severe exposure to only one other person's traumatic material can lead to symptoms, but for McCann and Pearlman (1990a), VT results from cumulative exposure to traumatized clients over time. The key construct validity question is whether these conceptual differences are reflected in differential associations for their measures.

This Study: Measurement Validity Hypotheses

Empirically, one would expect considerable shared variance between the two trauma-related instruments because the constructs share components of generalized distress as well as PTSD symptomatology, even though they may also tap different aspects of the same subjective experience. Subscales of the CFST and TSI-BSL were examined along with the summary scales to evaluate their validity as measures of their specific construct domains. Thus, our first concurrent validity hypothesis predicts that CFST and CFST-CF subscale scores will converge strongly with TSI-BSL scores. Second, when each of these measures is compared to general distress for evidence of adequate concurrent and discriminant validity, a moderate association is expected; all of these constructs involve general psychological distress as well as construct-specific symptoms. Third, strong convergence was expected between the CFST-BO and the MBI as evidence of concurrent validity regarding burnout.

Conceptual differences between secondary trauma, VT, burnout, and general distress led to three hypotheses about discriminant validity, here considered to be relative, given the component of distress (as well as method variance) common to all four measures and their subscales (except for the PA subscale of the MBI, which has a contrasting component of well-being). First, because secondary trauma focuses on PTSD-like symptoms, the CFST-CF subscale and MBI scores were expected to show moderate-to-low correlations. Second, because VT does not incorporate a burnout component, TSI-BSL scores were likewise expected to have only a moderate-to-low association with MBI scores. Third, because the MBI-PA subscale score connotes positive rather than negative affect, these scores were expected to have very low correlations with all other scores, lower than what would be expected given the shared method variance.

A final construct validity hypothesis predicted that the CFST-CF scale would be related to counselors' personal histories of traumatic interpersonal violence because the content domains of secondary trauma emphasize trauma symptoms (whether as a residual or reevoked by clients' material), whereas the other scales would be unrelated to such histories.

Method

Participants

The sample consisted of 104 counselors recruited from eight sexual assault and/or domestic violence agen-

cies, of whom complete data on the major measures were available for 99 (5 participants failed to complete the MBI correctly or at all as it sometimes became separated from the packet). Sexual assault agency counselors were 35% of the sample ($n = 35$) and domestic violence counselors 17% ($n = 17$); 48% ($n = 49$) worked with an agency that served both populations. Almost half were volunteers (46%) and more than half paid staff (63%) with some who did both (15%), as is typical of these agencies (thus strengthening generalizability); analyses of these data comparing paid staff and volunteers to test additional hypotheses about their differences based on previous studies are presented in Baird and Jenkins (in press). The four groups (sexual assault staff, sexual assault volunteers, domestic violence staff, and domestic violence volunteers) were combined for the present analyses. Participant response rate cannot be determined precisely, but appeared high, as questionnaires were mostly distributed and collected on the same occasion. Response rates for these occasions ranged from approximately 50 to 100%.

The sample consisted of 95 women and 4 men.⁵ Ages ranged from 21 to 65. Over half (52%) were married. The majority were heterosexual (93%), Anglo-American (77%), and/or Protestant (65%). The majority of participants had bachelor (37%) or master's degrees (47%) in a mental health field (62%). Most participants' yearly income averaged \$20,000 or more (75%) or \$10,000 or under (13%).

Procedure

The agencies' human resource/volunteer directors were approached via letter and follow-up telephone call as to the center's interest in research participation. Most visits coincided with scheduled staff meetings or volunteer in-service trainings. Typically the researcher attended those meetings and introduced the study, distributed questionnaires and consent forms, and explained confidentiality protections. After gathering completed materials, the researcher answered questions, provided a lecture about trauma, and facilitated a discussion about prevention and intervention on the basis of the literature.

⁵Because the very small number of men may respond differently from the much larger sample of women, (1) the genders were compared on all measures presented here, and no differences were significant; and (2) the analyses were rerun omitting the men, with no notable or significant differences.

Measures

Demographics and History

Participants provided demographic information and data concerning their work and counseling experience.

Compassion Fatigue Self-Test for Psychotherapists (CFST)

The CFST (Figley, 1995a), modified to address “staff and volunteer” rather than “therapist,” was used to assess secondary trauma via a 5-point Likert scale (1 = *rarely*; 5 = *very often*) for 40 questions. This instrument contains a total scale score (CFST-SUM) and two subscales, CFST-CF (23 items) and CFST-BO (17 items), summing the designated questions for each subscale. Reported internal consistency reliability alphas range from .86 to .94; factor analysis indicated one stable factor reflecting depressed mood regarding work, and fatigue, disillusionment, and worthlessness (Figley & Stamm, 1996). For this study, Cronbach’s alphas of .84 for the CF subscale, .83 for the BO subscale, and .90 for the CFST-SUM were obtained.

TSI Belief Scale, Revision L (TSI-BSL)

Vicarious trauma was measured with the TSI Belief Scale, Revision L (Pearlman, 1996a). This 80-item, 6-point Likert scale (1 = *disagree strongly*, 6 = *agree strongly*) instrument measures disruptions in five cognitive schemes/beliefs (safety, trust, esteem, intimacy, and control), each about self and others, yielding 10 subscales. Scores obtained include a total score calculated from the sum of all responses; a higher score indicates greater disruption. The average score for mental health professionals is 166.83 (Pearlman & Mac Ian, 1995). Pearlman’s review of unpublished studies reported overall internal consistency reliability (Cronbach’s alpha) of .98 (Pearlman, 1996a), with subscale reliabilities ranging from .77 (other-control) to .91 (self-esteem). Schauben and Frazier’s study of psychologists and counselors working with sexual violence survivors reported internal consistency reliabilities of five selected subscales ranging from .68 to .84 (Schauben & Frazier, 1995). Acceptable reliabilities were also reported by Brady, Guy, Poelstra, and Brokaw (1999), Cunningham (1996), and Pearlman and Mac Ian (1995). For this study, Cronbach’s alpha was .95 for the total score; subscale alphas varied from .62 to .83.

Maslach Burnout Inventory (MBI)

The MBI (Maslach, 1996) is a 22-item self-report inventory appraising the three burnout dimensions of emotional exhaustion, depersonalization, and reduced sense of personal accomplishment, as well as a total score. The EE scale entails being mentally and emotionally overextended and exhausted by one’s work. DP scale refers to a detached and impersonal response toward one’s clients. PA scale is related to positive feelings such as competence and success in work with people, and is reversed to indicate burnout. High EE and DP and low PA scores indicate greater degrees of burnout (Maslach, 1996).

The MBI questions the respondent on the frequency (“how often”) with which various feelings related to burnout occur during their work year (Maslach & Jackson, 1981). The 7-point Likert scale for the MBI ranges from 0 (*never*) to 6 (*every day*). Each of the three subscale scores is derived from adding designated responses. The total score is derived from adding all responses, after reversing the PA score. For this study, Cronbach’s alphas of .91 for the MBI-EE subscale, .81 for MBI-DP, .92 for MBI-PA, and .91 for the summary score (MBI-SUM) were calculated.

Symptom Checklist-90 – Revised (SCL-90-R)

Symptoms of general psychological distress were assessed utilizing the SCL-90-R (Derogatis, 1983). This measure is a widely used multidimensional self-report inventory containing 90 Likert scaled items rated from 0 (*not at all*) to 4 (*extremely*). The SCL-90-R examines general psychological symptom patterns for the last 7 days. The Global Severity Index (GSI) indicates general psychological distress. For this study, a Cronbach’s alpha of .77 for the GSI was calculated. However, very few people indicated moderate-to-extreme symptomatology; the marked skewness (typical for this measure among nonpatients) and lack of variance on many of the items cautions one to interpret the alphas accordingly.

TSI Life Events Checklist

Staff/volunteers’ personal victimization history was evaluated through the TSI Life Events Checklist (short form; Pearlman, 1996b), indicating which of 19 potentially traumatic events they had survived and/or witnessed. These data were used to identify individuals whose histories suggested possible greater vulnerability to clients’ traumas similar to their own. Experience of either sexual assault or domestic violence trauma was derived from the

Table 1. Correlations Among Measures of Trauma-Related Constructs, Burnout, and General Distress

	CFST-SUM	CFST-CF	CFST-BO	TSI-BSL	MBI-SUM	MBI-EE	MBI-DP	MBI-PA
CFST-SUM	1.00							
CFST-CF	.93***	1.00						
CFST-BO	.89***	.65***	1.00					
TSI-BSL	.58***	.58***	.24*	1.00				
MBI-SUM	.52***	.38***	.34***	.44***	1.00			
MBI-EE	.53***	.34***	.24*	.30**	.70***	1.00		
MBI-DP	.36***	.22*	.20*	.30**	.61***	.57***	1.00	
MBI-PA	-.10	-.14	-.19	-.24*	-.54***	.19	.06	1.00
SCL-90-R GSI	.65***	.61***	.27**	.64***	.38***	.41***	.18	-.09

Note. *N*s range from 97 to 101. CFST-SUM = Compassion Fatigue Self-Test for Psychotherapists (CFST) total score; CFST-CF = CFST Compassion Fatigue scale; CFST-BO = CFST Burnout scale; TSI-BSL = Traumatic Stress Institute Belief scale, Revision L; MBI-SUM = Maslach Burnout Inventory (MBI) total score. MBI-EE = MBI Emotional Exhaustion scale; MBI-DP = MBI Depersonalization scale; MBI-PA = MBI Personal Accomplishment scale; SCL-90-R GSI = Symptom Checklist-90 -- Revised, Global Severity Index.

* $p < .05$. ** $p < .01$. *** $p < .001$.

presence of an affirmative response to any of five items: Item 12, experienced sexual contact before age 18 with someone in your family who was at least 5 years older; Item 13, experienced sexual contact before age 18 with someone other than a family member, who was at least 5 years older; Item 18, experienced rape or other sexual assault at age 18 or older; Item 8, experienced domestic violence, neglect, or physical abuse as a child; Item 9, experienced domestic violence, neglect, or physical abuse as an adult.

Results

The sample demographics did not differ notably from similar samples in previously published research or from the centers' total staff, except in being a little less symptomatic on the CFST-BO, MBI, and SCL-90-R GSI, the latter compared to Derogatis' nonpatient sample (Derogatis, 1983). Regarding personal trauma histories, 55% reported either sexual assault or domestic violence. This history was unrelated to age, education, income, counseling experience, or workload. There were few notable associations between demographics and outcome scales, none requiring statistical controls in the hypothesis tests.

The CFST and TSI-BSL summary and subscale scores were correlated with summary and subscale scores for the MBI, GSI, and each other to examine their concurrent and discriminant validity. Both summary and subscale analyses are presented to allow evaluation of the latter's representation of their specific construct domains. Correlations of .00–.20 are considered "small" or low, correlations of .21–.40 are considered "medium" or moderate, and correlations of .41 and above are "large," strong, or high (Cohen, 1992). For one-tailed hypotheses at $p < .05$, $N = 100$ gives 64% power for detecting correlations of .20 and 99% power for detecting correlations of .40.

Tests of Concurrent Validity Hypotheses

Hypothesis 1. Strong concurrence of CFST-SUM and CFST-CF with TSI-BSL. This hypothesis was supported by strong significant relationships, $r(97) = .58$, $p < .001$, and $r(98) = .58$, $p < .001$, respectively (Table 1).

Hypothesis 2. Moderate concurrence of trauma-related and burnout measures with general distress (SCL-90-R GSI). Correlations of the CFST-SUM, CFST-CF, and TSI-BSL with the GSI were strong rather than moderate (.61–.65; Table 1), and those of the CFST-BO and MBI-SUM (.27 and .38) with the GSI were medium-sized as predicted.

Hypothesis 3. Strong concurrence of CFST-BO with MBI. The CFST-BO and MBI-SUM, MBI-EE, and MBI-DP were only moderately related (.34, .24, and .20, respectively). The association of CFST-BO with MBI-PA was slightly smaller and negative.

Tests of Discriminant Validity Hypotheses

Hypothesis 4. Discrimination of CFST-CF from MBI. As predicted, the CFST-CF subscale was moderately correlated with the MBI-SUM, MBI-EE, and MBI-DP (.38, .34, and .22, respectively) and not with the MBI-PA, consistent with these scales' associations with the GSI.

Hypothesis 5. Discrimination of TSI-BSL from MBI. The association between the TSI-BSL and MBI-SUM was high rather than moderate-to-low as predicted; those of the TSI-BSL with MBI subscales were moderate.

Hypothesis 6. Discrimination of CFST-SUM, CFST-CF, CFST-BO, TSI-BSL, and SCL-90-R GSI from MBI-PA. Higher MBI-PA scores were moderately related to

Table 2. Effects of Sexual Assault and/or Domestic Violence Trauma History on Trauma-Related Symptoms

Measure	Sexual assault and/or domestic violence history ($n = 56-61$)		No sexual assault or domestic violence history ($n = 43-44$)		t	Point-biserial r
	M	SD	M	SD		
CFST-SUM	68.3	16.0	58.1	11.6	-3.70***	.33***
CFST-CF	38.6	9.3	30.9	6.7	-4.85***	.42***
CFST-BO	31.3	14.7	27.1	5.7	-1.96	.17
TSI-BSL	166.1	35.4	155.2	32.2	-1.60	.16
SCL-90-R GSI	0.46	.35	0.33	.27	-2.07*	.20*

Note. CFST-SUM = Compassion Fatigue Self-Test for Psychotherapists (CFST) total score; CFST-CF = CFST Compassion Fatigue scale; CFST-BO = CFST Burnout scale; TSI-BSL = Traumatic Stress Institute Belief scale, Revision L; SCL-90-R GSI = Symptom Checklist-90 -- Revised, Global Severity Index.

* $p < .05$. *** $p < .001$.

lower TSI-BSL scores. Relations between MBI-PA and CFST-SUM, CFST-CF, CFST-BO, and SCL-90-R GSI were low as predicted.

Test of Construct Validity Hypothesis

Hypothesis 7. Only CFST-CF scale related to interpersonal trauma history. Counselors reporting histories of sexual assault and/or domestic violence scored higher on CFST-SUM and CFST-CF scales, but not on the CFST-BO, TSI-BSL, or MBI scales, than did those not reporting such a history (Table 2).

Followup Analyses: Partialing General Distress

To determine the associations of these scales apart from their shared variance with general distress, partial correlations among summary scales were computed with GSI scores controlled. The partial correlation between CFST-SUM and TSI-BSL remained significant, if only medium-sized, partial $r(96) = .28$. Both scales also retained moderate relationships with MBI-SUM, partial $r(94) = .38$ for CFST-SUM and partial $r(95) = .28$ for TSI-BSL, consistent with the predicted stronger association of STS with burnout. In a multiple regression using the three variables to predict MBI-SUM scores, CFST-SUM accounted for significant unique variance of medium effect size, partial $r = .36$, $p < .001$, whereas TSI-BSL scores explained only marginal unique variance of small effect size, partial $r = .18$, $p < .08$. When both GSI and MBI-SUM scores were controlled, CFST-SUM and TSI-BSL remained significantly related, partial $r(93) = .20$.

The pattern of subscale associations also shifted toward support for the concurrent hypotheses. With general distress controlled, CFST-BO was slightly more strongly related to MBI-SUM than was CFST-CF, .27 versus .20,

respectively. However, in a multiple regression using CFST-CF, CFST-BO, and the GSI to predict MBI-SUM, CFST-BO explained significant unique variance in the latter, partial $r = .48$, $p < .001$, whereas the contribution of CFST-CF was negligible, partial $r = -.04$. The partial correlations of TSI-BSL with CFST-CF and CFST-BO were much lower than the zero-order counterparts, $r_s = .31$ and $.09$, respectively, with only the first accounting for significant unique variance. With both GSI and MBI-SUM controlled, TSI-BSL and CFST-CF scores still shared significant variance, partial $r(93) = .28$, but TSI-BSL and CFST-BO scores did not, partial $r = .02$.

Shared Components of Subscales

Considering the conceptual similarities and differences between the constructs, we evaluated the possibility that distinctive components of shared variance might be captured by different subscales in a more comprehensive analysis, as consistent with theory. For example, we might expect to see a trauma-related factor, a burnout factor, and perhaps a general distress factor. Thus, the subscales (except for TSI-BSL, used as a summary score because of its high internal consistency) were factor-analyzed using principal components analysis with varimax rotation. Two factors having eigenvalues greater than 1.0 emerged, which collectively accounted for 67% of the variance in the correlation matrix. (The first unrotated factor explained 48% of the variance, consistent with the expected common variance due both to measurement method and general distress.) The GSI, CFST-CF, and TSI-BSL scales marked one factor, with loadings over .70; CFST-BO, MBI-EE, and MBI-DP marked the second factor, with similarly high loadings (see Table 3). MBI-PA crossloaded on both factors, loading negatively on the trauma/distress factor and positively on the burnout factor.

Table 3. Factor Matrix (Varimax Rotation) Showing Trauma-Related and Burnout-Related Factors

Variable	Factor 1 loadings	Factor 2 loadings
TSI-BSL	.82	.18
SCL-90-R GSI	.76	.31
CFST-CF	.72	.35
CFST-BO	.48	.74
MBI-EE	.20	.86
MBI-DP	.11	.75
MBI-PA	-.58	.45

Note. TSI-BSL = Traumatic Stress Institute Belief Scale, Revision L; SCL-90-R - GSI = Symptom Checklist -- 90 Revised, Global Severity Index; CFST-CF = Compassion Fatigue Self-Test for Psychotherapists; CFST-BO = Compassion Fatigue scale; CFST-BO = CFST Burnout scale; MBI-EE = Maslach Burnout Inventory (MBI) Emotional Exhaustion scale; MBI-DP = MBI Depersonalization scale; MBI-PA = MBI Personal Accomplishment scale.

Discussion

This investigation examined the concurrent, discriminant, and construct validity of the instruments designed to measure the constructs of secondary traumatic stress/compassion fatigue and VT by comparing those instruments with each other and with more established measures of burnout and general distress. Results showed evidence of good concurrent validity for the CFST and TSI-BSL (considering their conceptual differentiation), and appropriate associations with general psychological distress for the CFST, TSI-BSL, and MBI, but inadequate evidence for concurrent validity between measures of burnout (CFST-BO and MBI). Partialling general distress from these analyses strengthened support for the hypotheses.

Concurrent validity associations supported the first two hypotheses. First, high correlations of the CFST-SUM and CFST-CF with the TSI-BSL showed good concurrence. Second, these three correlated similarly with the GSI. For the CFST and TSI-BSL, the associations were larger than what would allow for good differentiation from general distress. Still, the trauma-related scales had somewhat more in common with each other than each had with general distress, given that their partial correlation was still medium-sized with GSI scores controlled. Another follow-up analysis found that even partialing MBI scores in addition did not explain their association completely. For the third concurrent hypothesis, the moderate and small correlations between CFST-BO and MBI were not large as predicted, and these were further lowered (though still significant) when GSI scores were partialled. Still, CFST-BO explained a large amount of unique variance in MBI scores after GSI scores and the CFST-CF subscale were controlled.

The major aspects of discriminant validity for the CFST and TSI-BSL summary scales were adequately supported. These scales were correlated more strongly with each other than either was with the MBI, likely in part because of their greater association with general distress compared with the latter, but also because of their common components of psychological trauma symptoms. As expected because of their content domain differences, CFST-SUM correlated a little more highly with MBI-SUM than did the TSI-BSL when GSI scores were controlled. In addition to the BO subscale, the CFST and MBI share a common component of emotional exhaustion not covered by the TSI-BSL. The TSI-BSL and MBI were less well differentiated than what had been expected on the basis of their constructs' conceptual divergence. The TSI-BSL correlated strongly with MBI-SUM (still moderately with general distress controlled) and at moderate levels (.30 range) with the MBI subscales, providing merely adequate support for discriminant validity. Some of that shared variance appears to represent positive intrinsic job satisfaction, given the moderate negative correlation of TSI-BSL and MBI-PA (i.e., lower negative cognitive disruptions were associated with more positive experiences of working with clients). Taken together, the CFST-CF and CFST-BO subscales did not show the degree of discriminant validity from each other that would be expected from the definitions of their respective constructs. The clearest discriminant validity evidence involved the small correlations between the MBI-PA and all other scales except TSI-BSL, which were all nonsignificant and very small despite the likelihood of shared measurement method error variance.

The construct validity of both trauma-related measures was supported by their differential associations with counselors' prior trauma history, consistent with the CFST-SUM and CFST-CF scales' item content as measures of trauma symptoms, and by the independence of TSI-BSL scores from that history, consistent with its emphasis on cognitive beliefs. CFST-CF, which has the largest component of PTSD-like symptoms, differentiated therapists with a history of sexual assault or domestic violence from those without, providing evidence of criterion-related validity. In contrast, CFST-BO, TSI-BSL, MBI, and SCL-90-R GSI scores, which have less PTSD content, did not differ between these groups.

Finally, the factor analysis provided a comprehensive picture of the differentiation of these measures into a factor primarily concerned with trauma and general distress and one centering on burnout. The trauma factor captured general distress along with trauma symptoms from the CFST-CF and TSI-BSL, plus the absence of personal accomplishment at work that the MBI-PA measures. The burnout factor included not only the MBI-EE and DP

subscales and the CFST-BO, but also the positive part of job accomplishment, which might reflect some of the “good stress” aspects of interpersonally demanding jobs that workers often report before its excess leads to burnout.

The findings related to the CFST suggest a reformulation of its conceptual structure regarding the component of burnout, specifically, a return to Figley’s emphasis on the CF scale as the center of the construct (Figley, 1995a), and away from the more recent incorporation of burnout as a content domain (Figley & Kleber, 1995). The relatively weak association between the CFST-BO and MBI indicates that the CFST-BO does not capture the same construct of burnout as that measured by the MBI, and its inclusion diffuses the original theoretical focus of the secondary traumatic stress construct. Furthermore, despite Figley’s wish to depathologize and normalize these hazards of trauma work by recasting secondary trauma symptoms as “compassion fatigue,” this term invites misinterpretation from a content validity standpoint because most of the CF scale items (17 of 23) query trauma symptoms and experiences, and none evaluate compassion or fatigue (Figley, 1995a).

The present results suggest that STS and VT are experienced both similarly and somewhat differently by trauma therapists. The observed symptoms appear to result from assimilating other people’s traumatic material and have general distress plus some burnout as a shared symptom manifestation. However, STS and VT differ conceptually in their relative emphasis on emotional/social versus cognitive symptomatology, and differ empirically in these measures’ item content and correlates. There is adequate evidence that neither of these measures is reducible to the other, and that their associations are not merely shared response bias (because common method variance did not induce a correlation with MBI-PA and was controlled by partialling GSI scores). For practical application, using the TSI-BSL and CFST-CF together would help in distinguishing therapists struggling primarily with the cognitive impact of trauma work from those suffering primarily PTSD symptoms and negative experiences with clients.

The inclusion of volunteers and domestic violence workers is one strength of this study; most research has focused on paid professional sexual assault counselors, despite the heavy reliance on volunteers by many underfunded agencies and the traumatizing nature of much domestic violence (Herman, 1992). Volunteers vary greatly in roles and client exposure, and their unpaid status may sometimes mean that they do not receive the training and social support for stress management that paid staff do, which may raise their risk for trauma-related difficulties (Baird & Jenkins, in press).

Methodological limitations of the study included the lack of precise information about the response rate for each agency and the characteristics of nonrespondents, who might be more distressed than those included. The generalizability of these findings from a primarily White, female, and heterosexual sample of counselors to a more varied population requires testing also. Longitudinal data would be necessary to assess symptom development over time in relation to specific types of stressors such as challenging experiences with clients and lack of institutional support from the workplace.

One important future topic is the etiological process of secondary and VT development. Although refined quantification of exposure to traumatized clients may be challenging, it would be helpful to evaluate the impact of exposure on the counselor. The theoretical link between counselors’ empathic sensitivity, effectiveness in the role, and trauma vulnerability should be tested. Understanding why individuals might terminate their trauma work would be helpful for sexual assault and domestic violence agencies, given that they are likely the most affected, and that burnout predicts greater job turnover (reviewed in Maslach, 1982, 1987).

Further investigations of STS and VT should elaborate on the similarities and differences between their conceptualizations and instruments. The content validity of these measures might benefit from further refinement to emphasize the distinctive features of their constructs and to further distinguish both from general distress. The present findings suggest that the CFST-BO subscale in particular needs reexamination; its low correlation with the MBI makes it a questionable measure of burnout, even if it taps a more compassion fatigue-related form of burnout. Perhaps this scale should be renamed to better capture its content and empirical associations. Meanwhile, the CFST-CF scale appears to be the more valid measure.

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