

# Burnout, Secondary Traumatic Stress, and Social Support

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**Abstract** The current study examines the extent to which selected work-related variables differentially predict burnout and secondary traumatic stress (STS) and the degree to which social support mitigates both of these occupational stress syndromes. Multiple regression performed on responses from 331 professional chaplains found that: (1) the number of years worked in the same employment position was positively associated with burnout but not STS; (2) STS, but not burnout, was positively associated with the number of hours spent per week counseling patients who had had a traumatic experience; and (3) social support was negatively related to burnout and STS. Only specific sources of social support (supervisory support and family support), however, were negatively associated with burnout. Results highlight the need for counselors to be attuned to not only their clients but also to their own inner dynamics in order to mitigate the possible deleterious effects of their work.

**Keywords** Secondary traumatic stress · Burnout · Social support · Counseling · Chaplains

## Introduction

Job burnout was first recognized as a psychological problem among healthcare and social service professionals in the 1970s (Pines and Maslach 1978). Extensive interviews with such workers revealed they often experienced emotional depletion and loss of motivation resulting from prolonged emotional stress encountered in their jobs. Subsequent research identified the three distinct features now recognized as comprising burnout: emotional exhaustion, depersonalization (a defense mechanism by which caregivers and service providers experience emotional distance from their clients), and feelings of ineffectiveness or lack of personal accomplishment (Maslach 2003; Maslach et al. 2001). Burnout was originally conceptualized as a response to job stress produced by the demands of helping needy clients (Maslach 1982). It was quickly realized, however, that institutional/

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organizational factors seemed to contribute to burnout (Maslach and Florian 1988; Maslach and Leiter 1997).

As was the case with burnout, research on secondary traumatic stress (STS) emerged from observations of psychological problems among caregivers (Figley, 1995; Kadambi and Ennis 2004). Like burnout, STS was primarily conceptualized as a response to the stress of interpersonal interactions between helper and client. As Jenkins and Baird (2002) stated, burnout and STS “are similar in that they result from exposure to emotionally engaging clients via interpersonally demanding jobs, and represent debilitation that can obstruct providers’ services”(p. 423). Unlike burnout, STS continues to be viewed mainly as a response to dealing with clients, specifically people who have been traumatized. Figley (1995), who coined the term “compassion fatigue” in reference to STS among mental health professionals, described STS as “the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other” (p. 7).

Thomas and Wilson (2004) view STS as part of a group of related occupational stress syndromes, including vicarious trauma and compassion fatigue. These syndromes have five basic components: (1) frequent intense encounters with clients; (2) physical and mental fatigue states; (3) challenges to values, beliefs and world view; (4) exposure to traumatized clients; and (5) expectable stress responses. Some of these components are elements of burnout, along with feelings of disillusionment, isolation, and emotional distancing that also occur in both STS and burnout (Figley 1995). However, STS has a more clear operational definition than vicarious traumatization (Kadambi and Ennis 2004) and is distinguished from burnout in that its core symptoms are similar to the symptoms of post-traumatic stress disorder (PTSD), including flashbacks, nightmares, and intrusive thoughts (Figley 1995). Figley and most other authors consider STS and compassion fatigue to be the same phenomenon.

Whereas burnout appears to result, in part, from the confluence of interpersonal and institutional sources of occupational stress, STS is thought to be a unique occupational hazard among those working with trauma victims (Figley 1995; McCann and Pearlman 1990; Thomas and Wilson 2004). McCann and Pearlman (1990) argue that while burnout and STS are similar in some ways, “the potential effects of working with trauma survivors are distinct from those of working with other difficult populations because the therapist is exposed to the emotionally shocking images of horror and suffering that are characteristic of serious trauma” (p. 134). Both, however, can impair a helper’s ability to work effectively with clients and colleagues (Dutton and Rubinstein 1995; Farber and Heifetz 1982). Moreover, both have been found to be associated with, and may contribute to, depression and anxiety disorders (Ahola et al. 2005; Davidson and Fairbank 1993; Willcock et al. 2004).

The current study examines burnout and STS in professional chaplains. Like other clergy, chaplains typically help family members deal with the emotional distress of grief and bereavement (Flannelly et al. 2003; Fogg et al. 2004). Chaplains also address a range of other emotional reactions of patients and families, including anxiety, depression, and loneliness. Because of the nature of their work, chaplains deal with these and other emotional issues on a much more regular basis than do other clergy (Fogg et al. 2004; Flannelly et al. 2003; Moran et al. 2005), which may contribute to burnout in chaplains (Flannelly et al. 2005a, b). These and other aspects of chaplains’ clinical work overlap with traditional therapy. At times, chaplains may also be involved in disaster relief work, as was the case following the September 11th attacks in New York City (Flannelly et al. 2005a, b; Roberts et al. 2003). Findings from chaplains and other clergy in the former study indicated two sources of STS, one of which reflected work at Ground Zero and the other which represented work with trauma victims on a regular basis.

## Interaction model of occupational stress

Grosch and Olsen (2000) and Weiner (1989) propose interaction models of burnout in clergy and hospital social workers, respectively. Both models conceptualize occupational stress as an interaction of individual and institutional characteristics in which “the self” combines with “the system” in begetting stress syndromes. In tying “self” with systems theory, these authors suggest how essential personal resources such as self-esteem, self-efficacy, and social support (Hobfoll 2002) play a role in these syndromes.

Using Kohut’s Self Psychology as their framework, Grosch and Olsen (2000) conceptualize the intrapsychic components of chaplain burnout as emerging from a longing to feel appreciated and the concomitant faltering of self-esteem that occurs when a helper does not feel effective. From this perspective, helpers were often interpersonally sensitive children who learned to adapt to and in many cases meet the expressed and unexpressed basic needs of their parents, thereby satisfying the parents’ needs that remained unaddressed from their childhood years (Miller 1979). In the process of meeting their parents’ needs, however, the children’s own needs remain unidentified and unmet. The outcome of this process is a tendency for helpers to repeat their childhood pattern of behavior in which they maintain their sense of self-esteem and self-worth by satisfying the needs of others. Hence, for clergy, “church members often provide the psychological function of confirming the pastor’s inner experience of self-worth” (Grosch and Olsen 2000, p. 621).

Self Psychology also helps us understand some of the intrapersonal contributions to developing symptoms in response to therapeutic work. Over-functioning is a common hallmark of such helpers, who often repeat their childhood patterns in an unconscious quest to stabilize their own sense of self. Unfortunately, this pattern can leave the helper vulnerable to occupational stress syndromes such as burnout and STS. Moreover, Self Psychology elucidates how one’s sense of self is regulated through feeling a sense of appreciation and efficacy through helping others. Indeed, Farber and Heifetz (1982) found that (a) over 57% of psychotherapists attributed their burnout to the non-reciprocated attentiveness and giving within the therapeutic alliance, and (b) over 73% cited “lack of therapeutic success.” The majority of therapists in this study found the role of social support from supervisors and work colleagues to be essential in ameliorating symptoms of burnout.

Grosch and Olsen (2000) rely on Bowen’s (1978) expansion of systems theory, which explores individual roles and how individuals differentiate themselves within systems along a continuum from being emotionally “cut-off” to being completely fused with the system. Both of these positions, which were formed in the original system (the family of origin), are reactive and do not result in an individual’s full differentiation from the system. Hence, under times of increased stress, an individual is vulnerable to returning to their early relational patterns. For example, a clergy member experiencing increased job demands over time may revert back to a less-defined level of self-differentiation along the continuum from cut-off to fusion and may consequently struggle with role boundaries and the inability to set limits on work.

The interaction between self and system can foster burnout and, perhaps, related syndromes in a number of ways. While the helper tries to confirm his or her self-worth through others, the childhood experience that leads them to do so may make them more prone to burnout or STS since, in Weiner’s (1989) words, “The person who felt unrewarded and unappreciated for who he or she was in childhood is much more vulnerable to uncaring responses in the environment” (Weiner 1989, p. 97). As noted above, the listening role, which is a central element of chaplaincy and other professional practices, can often be unrewarding, leading to lowered self-esteem. The strong need for external confirmation of

self-worth may be particularly problematic in highly bureaucratic systems, such as hospitals, which often demand high levels of performance with little reward or support (Weiner 1989). We will discuss the role of social support in a later section.

The interaction of self and system also comes into play with respect to self-efficacy (Weiner 1989). For example, the idealistic expectations that clergy have about helping others (Grosch and Olsen 2000) are likely to exacerbate stress responses among hospital chaplains because short patient lengths-of-stay and high work-loads limit the time chaplains have with individual patients, thereby reducing their sense of self-efficacy. Previous research has shown that the sense of meaning clinical staff derive from their work is related to the opportunity to care for patients over extended periods of time (Overvold et al. 2005). At least part of this effect may be attributable to feelings of self-efficacy.

### Variables contributing to burnout

A wide range of institutional factors is believed to contribute to burnout. Issues such as an autocratic administrative style, limited opportunities for promotion, lack of autonomy, lack of appreciation or rewards (salary, vacation time, etc.) may lower self-esteem over time (Maslach et al. 2001; Weiner 1989). On the other hand, cost-effectiveness measures that lead to understaffing and/or high caseloads may undercut one's ability to properly perform one's functions, lowering ones' sense of self-efficacy (Lewandowski 2003). Whatever the case may be, burnout tends to build-up relatively slowly across time, with some studies indicating it may take years to develop (Maslach and Florian 1988; Maslach et al. 2001). Hence, many studies have used time measures without looking at the actual factors that contribute to burnout.

Two of the most commonly used time measures in research on burnout are years in the same position and years in the same profession. The first taps a variety of institutional characteristics that may influence burnout and is an important variable in our model. Several studies have found that the number of years one has been in the same position is positively correlated with burnout among psychotherapists and counselors (e.g., Maslach and Florian 1988; Vredenburg et al. 1999), and we would expect the same to hold true for chaplains. Some studies have found that the total number of years of professional experience is inversely related to burnout among counselors and therapists (Ackerley et al. 1988; Boscarino et al. 2004), but a meta-analysis of three dozen studies found this effect to be small at best (Brewer and Shapard 2004).

A number of studies have evaluated the association between job setting and burnout (Maslach and Florian 1988; Reid et al. 1999). For example, Dupree and Day (1995) found that psychotherapists in private practice exhibited lower levels of burnout than those working in the public sector, and Vredenburg et al. (1999) reported similar findings for psychiatrists working in hospitals compared to those in private practice.

Weiner (1989) argues that social workers who work in hospitals may be particularly prone to burnout because hospitals tend to have rigid hierarchical systems in which physicians and other medical professionals hold the highest status. Chaplains, like social workers, hold far less prestigious positions than medical staff and thus may be equally prone to burnout in such settings, but the findings are limited (Flannelly et al. 2005a, b). In contrast to these findings, Prosser et al. (1999) reported that burnout was lower among mental health professionals working in hospital settings compared to those working in community settings.

Workload has also been shown to contribute to burnout (e.g., Farber and Heifetz 1982; Maslach and Florian 1988). More demanding workloads impinge on helpers' ability to

perform their duties effectively, thereby lowering their sense of self-efficacy. Since over-functioning is a common characteristic of helpers, they may not recognize that their workload is the problem and may instead internalize the cause. The number of hours per week of direct client contact is the most commonly used measure of workload in studies of therapists, counselors, social workers, and chaplains (e.g., Ackerley et al. 1988; Coady et al. 1990; Flannelly et al. 2005a, b; Ross et al. 1989; Vredenburgh et al. 1999). All of the studies just cited reported that one or more measures of burnout increased with hours of patient contact. The exception was Ross et al. (1989), whose sample averaged less than 17 hours of patient contact per week and fell in the middle or lower thirds of Maslach and Jackson's (1981) norms for the Maslach Burnout Inventory (MBI).

The most frequently studied demographic variables in research on burnout are age, gender, and to a lesser extent education. Although an association between age and burnout is not always evident, a meta-analysis of burnout research found a small negative correlation between age and emotional exhaustion (Brewer and Shapard 2004). Generally, gender is not a strong predictor of burnout, and gender differences are not consistent across studies (Cordes and Dougherty 1993; Maslach et al. 2001). A literature review by Maslach et al. (2001) suggests that individuals with higher levels of education may be more prone to burnout.

### Variables contributing to STS

Although burnout and STS may be similar to some degree, STS is specifically thought to be the result of indirect exposure to another person's traumatic experiences, such that a helper acquires symptoms that are much like those of the traumatized person he/she is trying to help (Figley 1995; McCann and Pearlman 1990; Thomas and Wilson 2004). Hence, whereas burnout develops from prolonged occupational exposure to demanding interpersonal situations and institutional factors, STS develops over consecutive interactions with traumatized individuals. STS has a relatively fast onset, according to Figley (1995), and it may even arise from a specific event. A number of factors may be at work. Like burnout, STS may be partially related to a reduction in self-efficacy. Given its rapid development, however, STS may be more closely related to helpers' reduced sense of safety and self-control in a world where horrific events can apparently happen to anyone (McCann and Pearlman 1990; Rosenbloom et al. 1999).

Although the onset of STS is thought to be relatively rapid, Pearlman and MacLan (1995) found the number of years worked as a trauma therapist was positively related to symptoms of STS. This suggests there might be cumulative effects of trauma counseling over time. However, this correlation was only found among therapists who had a personal history of trauma. The only other published studies to examine this relationship reported that STS may be inversely related (Chrestman 1999) or unrelated to years of professional experience (Boscarino et al. 2004). Thus, there is no solid evidence upon which to make a prediction about the relationship between professional experience and burnout.

Several studies indicate therapists and counselors are more likely to have STS symptoms the more they work with trauma victims (Chrestman 1999; Kassam-Adams 1999; Schauben and Frazier 1995). Kassam-Adams (1999) specifically found that STS was directly related to number of hours counseling trauma victims and not to the number of hours counseling other clients. Flannelly et al. (2005a, b) also found STS to be positively related to hours worked with trauma victims. On the other hand, Baird and Jenkins (2003) found no correlation between hours per week of trauma counseling or number of trauma clients counseled per week and STS. But that study examined a relatively small ( $N=101$ ) and diverse sample of sexual assault and domestic violence counselors, including interns,

hotline workers, therapists, case managers, directors, and educators. One would presume that the nature of client contact among case managers, hotline workers, educators, and the like would not be the same as it is for counselors and therapists who listen to clients retell their traumatic experiences. For such non-clinical staff, contact hours do not include the indirect exposure to traumatic events that is believed to induce STS in clinicians working with traumatized clients.

Apart from social support, which will be discussed below, few studies have examined the role of institutional factors in STS. Most of this research has focused on ways in which organizations can help reduce STS (Bell et al. 2003). These include providing a safe and secure environment, education programs, and a varied caseload of trauma and non-trauma clients.

Demographic variables have also received relatively little attention with respect to STS. A literature review by Lerias and Byrne (2003) summarizes the findings in the field. Based on the limited available data, it appears that female and younger trauma workers are somewhat more likely to exhibit signs of STS. Lerias and Byrne (2003) conclude that more highly educated individuals are less likely to exhibit STS, but none of the studies they cite looked at therapists or counselors.

### Effects of social support

Unlike personal resources, such as self-esteem and self-efficacy, Hobfoll (2002) views social support as a process, which includes actual behavior as well as perceptions of support. From a systems perspective, social support has been identified as a key resource in the environment leading to improved mental health and other positive physical outcomes (Cohen et al. 1997; Cohen and Wills 1985). Social support may also be viewed in the context of Self Psychology, in that the presence of intimate others in whom one can confide provides an effective means of maintaining self-esteem (Sarason et al. 1987). A number of studies have found that perceived social support is a vital resource in maintaining well-being in response to occupational stress (e.g., Beehr et al. 2003; Daniels and Guppy 1997; Frese 1999; Vermeulen and Mustard 2000).

Early research on burnout found that psychotherapists relied on social support from supervisors and/or colleagues to prevent burnout (Farber and Heifetz 1982) and that social support was associated with lower levels of burnout among human services workers (Shinn et al. 1984). Subsequent research strongly suggests that lack of support from supervisors can contribute to burnout (Friesen and Sarros 1989; Kalliath and Beck 2001; Maslach and Jackson 1982; Maslach et al. 2001), and some studies have found that support from supervisors may reduce burnout symptoms in teachers, school psychologists, and other kinds of workers (Baruch-Feldman et al. 2002; Greenglass et al. 1994). From a systems point of view, these two sets of findings complement each other. Lack of social support within an organization puts a strain on personal resources in response to occupational stress, which leads to burnout. In contrast, work-related sources of social support enhance personal resources in response to stress, ameliorating burnout. From a systems perspective it is likely that support from work colleagues, other than supervisors, would also be associated with lower burnout, and there is some evidence of this effect (Greenglass et al. 1997; Huebner 1994).

The role of social support from sources outside the workplace is not as well established. A study by Greenglass et al. (1996) found that social support from friends and family was associated with fewer burnout symptoms in teachers, and Baruch-Feldman et al. (2002)

found that support from family members was associated with lower burnout among traffic enforcement workers. From Bowenian theory, one would expect social support from family members to play a critical role in dealing with occupational stress, since the family one creates as an adult recreates the relational template of childhood. To the degree that the adult family helps to meet one's needs, we would expect that family support would be inversely related to occupational stress symptomology.

A number of authors have discussed the importance of social support for dealing with STS (see Figley 2002a), but little research has been conducted on this topic. A study by Ortlepp and Friedman (2002) is particularly germane since it examined the effects of social support on both the burnout and STS subscales of Figley's Compassion Fatigue Test. The findings indicated that social support was associated with lower scores among lay trauma counselors on both subscales. However, since all sources of social support were included in a single measure, the findings do not differentiate among the various sources of support. Kassam-Adams (1999) also reported that social support was inversely related to STS but did not distinguish between sources of support.

### Purpose and hypotheses

This study was designed to examine the degree to which working with traumatized clients and social support from family and co-workers are differentially related to burnout and STS.

Negative institutional factors are thought to have a cumulative effect over time that increases the severity of burnout by draining such resources as self-esteem and self-efficacy. STS, however, may not be immune to such factors, since STS is thought to result primarily from indirect exposure to the original traumatic events. Hence, we hypothesized that burnout would be positively associated with the number of years chaplains worked in the same position, whereas STS would not be related to years worked in the same position (Hypothesis 1).

Burnout results, in part, from the quality and quantity of helper-client interactions. As such, the amount of time that helpers spend with clients has been found to be a good predictor of burnout. STS, on the other hand, appears to be produced only by interactions with traumatized clients. This leads to two further hypotheses: burnout, but not STS, will be positively associated with the number of hours per week working with non-traumatized clients (Hypothesis 2); and STS, but not burnout, will be positively associated with the number of hours per week working with traumatized clients (Hypothesis 3). Finally, we hypothesized that social support from institutional sources (supervisors and co-workers) and personal sources (family and friends) would be inversely related to both burnout and STS (Hypothesis 4).

As noted above, several studies have found that rates of burnout differ among institutional settings, but the nature of the association is not clear. Similarly, there is evidence that burnout and STS might be associated with years of professional experience, but the findings are inconclusive. Although it is not possible to specify the direction of the associations between experience and institutional setting as they relate to burnout and STS, it is apparent that one should control for these variables when examining other factors that may contribute to burnout or STS. Hence, years of experience and institutional settings were used as control variables in our analyses. Likewise, age, gender, and education were used as control variables because they have been associated with burnout and STS to varying degrees.

## Method

### Participants

The participants comprised a convenience sample of 389 chaplains who attended a joint conference of the Association of Professional Chaplains, the National Association of Catholic Chaplains, the National Association of Jewish Chaplains, and the Canadian Association for Pastoral Practice and Education. Only 331 participants could be used in the statistical analyses because of missing data on the dependent variables or key independent variables.

About 13% of the participants came from Canada, with the remainder from every U.S. state except Hawaii, Alaska and Kentucky. Roughly 55% of the sample was male and 45% was female, and the participants ranged from 24 to 79 years of age. The mean (51.4 years) and median (52 years) ages were very close. Slightly more than two-thirds of the sample was Protestant (67.7%), a little over a quarter was Catholic (25.7%), and just under 6% was Jewish (5.7%). Less than 1% was from other religious faiths. Nearly three-quarters of the chaplains had a master's degree (74.3%), with most of the others having a doctoral (18.4%) or a bachelor's degree (6.0%).

Roughly two-thirds of the chaplains said they exclusively worked in direct care (66.8%), and 8.2% said their work included direct care along with supervisory or administrative duties. Although the remaining 23.8% described themselves as educators, supervisors, or administrators, all but twelve of them reported spending some amount of time with patients each week. Nearly 90% of all the chaplains reported that they worked in hospitals.

### Measures

*Dependent variables* Burnout was measured by the 17 items from the burnout subscale of the Compassion Fatigue Test, and STS was measured by the 23-item compassion fatigue subscale of the same test, which was developed by Figley (1995) to differentiate between these two occupational stress syndromes. Representative items from the burnout measure include: "I have felt weak, tired, run down as a result of my work as a helper" (exhaustion); "I wish I could avoid working with some people I help" (depersonalization); "I have thoughts that I am a 'failure as a helper'" (reduced personal accomplishment). Representative items from the STS measure include: "I find myself avoiding certain activities or situations because they remind me of a frightening experience" and "I experience troubling dreams similar to those I help." Other items include experiencing "flashbacks connected to those I help," having "outbursts of anger or irritability with little provocation," and experiencing "gaps in my memory about frightening events." We are aware of only one study that correlated the Figley and Maslach scales (MBI). That study reported a correlation of .34 between Figley's burnout scale and MBI-SUM, with lower correlations between Figley's scale and the MBI emotional exhaustion, depersonalization, and personal accomplishment subscales.

Baird and Jenkins (2003) and Flannelly et al. (2005a, b) reported identical Cronbach alpha for Figley's burnout measure ( $\alpha=.83$ ). The alpha for the STS scale in the two studies were, respectively, .84 and .87. To our knowledge, no study has confirmed the factor structure of Figley's burnout and STS scales. So, we used the data from the 97 chaplains and 246 other clergy in the 2005 Flannelly et al. sample to conduct a confirmatory factor analysis (CFA) on the current data set. First, we performed exploratory factor analysis on all the burnout and STS items in the 2005 dataset, using the maximum likelihood extraction procedure without rotation. The simultaneous analysis of all the scores yielded the factor loadings for burnout and STS which were used to construct a combined model of the burnout and STS scales in AMOS SEM Software (Byrne 2001). The CFA model assumed the burnout



and STS items only loaded on their respective scales. The CFA on the current data using that model yielded a GFI of .90 and a RMSEA of .07, indicating that the model provided a reasonable fit to the data.

*Work-related independent variables* Three work-related variables were used as independent variables: (1) number of years of work in current position; (2) number of hours per week spent counseling trauma victims; and (3) number of hours per week spent counseling patients who were not trauma victims (non-trauma hours).

*Social support* Social support was measured using four social support items adapted from Frese (1999) with minor rewording. How willing are the following people to listen to your work-related problems? How willing are the following people to listen to your personal problems? How easy are the following people to talk to? To what degree can the following people be relied upon when things get tough at work? The wording is slightly different than that used by Frese (1999), who, for example, asked “How much are each of the following people willing to listen to your work-related problems?”

Participants rated each of four categories of people on a 4-point scale: 1 = not at all, 2 = somewhat, 3 = fairly, and 4 = very. The four categories were: (1) immediate work supervisor, (2) work colleagues/co-workers, (3) close friends, and (4) family members or adult relatives. The responses from items 1 and 2 were averaged and the responses to items 3 and 4 were averaged to create the variables of support from “supervisors/colleagues” ( $\alpha=.82$ ) and “family/friends” ( $\alpha=.81$ ), respectively.

*Control variables* Age, gender, education, years of professional experience and work setting were used as controls in the analyses. Age was recorded as a continuous variable, and gender was coded as a dummy variable (1 = female; 0 = male). Education was measured on a 5-point scale ranging from high school to doctoral degree. Work-site was coded as 1 = hospital, and 0 = other work setting.

## Results

### Univariate and bivariate analyses

The intercorrelations among the all of the variables are presented in Table 1, along with the means and standard deviations of each variable. Of the demographic variables, age and gender were negatively related to burnout, and education was negatively related to STS. Among the work-related variables, years in current position was significantly correlated with burnout and number of trauma hours was significantly correlated with STS. Social support from family/friends and supervisors/co-workers both were significantly related to burnout and STS, but only social support from family and friends was significantly related to STS.

### Multivariate analyses

A series of multivariate regression analyses were performed to test the effects of the work-related and social support variables on the dependent variables—burnout and STS. Three models were tested for each dependent variable. Model 1 included only the control variables,

**Table 1** Mean, standard deviations of the variables and their bivariate correlations

| Variables                              | 1     | 2     | 3                 | 4                 | 5                 | 6                 | 7                 | 8    | 9                | 10                | 11                |
|--|-------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|------|------------------|-------------------|-------------------|
| <b>Controls</b>                        | M     | SD    |                   |                   |                   |                   |                   |      |                  |                   |                   |
| 1. Age                                 | 51.37 | 9.30  | –                 |                   |                   |                   |                   |      |                  |                   |                   |
| 2. Gender (female = 1)                 | .45   | .50   | .01               | –                 |                   |                   |                   |      |                  |                   |                   |
| 3. Education                           | 4.09  | .58   | .09               | -.18 <sup>b</sup> | –                 |                   |                   |      |                  |                   |                   |
| <b>Work-related variables</b>          |       |       |                   |                   |                   |                   |                   |      |                  |                   |                   |
| 4. Years of experience                 | 12.40 | 8.59  | .38 <sup>b</sup>  | -.25 <sup>b</sup> | .27 <sup>b</sup>  | –                 |                   |      |                  |                   |                   |
| 5. Years in current position           | 6.10  | 5.78  | .23 <sup>b</sup>  | -.19 <sup>b</sup> | .09               | .50 <sup>b</sup>  | –                 |      |                  |                   |                   |
| 6. Work site (hospital = 1)            | .76   | .43   | .06               | -.05              | .04               | .06               | .05               | –    |                  |                   |                   |
| 7. Non-trauma hours per week           | 9.21  | 10.36 | .02               | .12 <sup>a</sup>  | -.15 <sup>b</sup> | -.23 <sup>b</sup> | -.10              | .10  | –                |                   |                   |
| 8. Trauma hours per week               | 5.21  | 7.06  | -.06              | -.02              | -.02              | -.10              | -.02 <sup>a</sup> | -.05 | .20 <sup>b</sup> | –                 |                   |
| <b>Social support</b>                  |       |       |                   |                   |                   |                   |                   |      |                  |                   |                   |
| 9. Support from supervisors/co-workers | 4.41  | 1.38  | .05               | .01               | -.02              | .10               | .04               | -.02 | -.02             | –                 |                   |
| 10. Support from family/friends        | 4.57  | 1.17  | -.09              | -.03              | .15 <sup>b</sup>  | .12 <sup>a</sup>  | .04               | -.02 | .02              | .21 <sup>b</sup>  | –                 |
| <b>Dependent variables</b>             |       |       |                   |                   |                   |                   |                   |      |                  |                   |                   |
| 11. Burnout $\alpha = .85$             | 26.84 | 8.03  | -.14 <sup>b</sup> | -.14 <sup>a</sup> | -.03              | -.05              | .11 <sup>a</sup>  | .08  | -.02             | -.16 <sup>b</sup> | -.21 <sup>b</sup> |
| 12. STS $\alpha = .83$                 | 28.37 | 10.86 | -.03              | .03               | -.16 <sup>b</sup> | -.05              | .01               | .10  | .12 <sup>a</sup> | -.05              | -.16 <sup>b</sup> |

*N* = 331. <sup>a</sup> Correlation is significant at the 0.01 level (2-tailed). <sup>b</sup> Correlation is significant at the 0.05 level (2-tailed). For gender, 1 = female, 0 = male; For education, 1 = no degree, 2 = associate degree, 3 = baccalaureate degree, 4 = master's degree, 5 = doctoral degree. For institutional work site, 1 = hospital, 0 = other.

Model 2 tested the effects of the work-related variables along with the controls, and Model 3 tested the main effects of the two social support variables along with all the other variables.

Table 2 shows the results of the regression models for burnout and STS. Age and gender exhibited the same negative relationship to burnout that they had in the bivariate analyses. Likewise, education exhibited the same negative relationship to STS that it had in the foregoing analyses. Age and education might both be expected to be positively associated with self-esteem, but it is not immediately evident why one would be associated with burnout and the other with STS.

The results confirm Hypothesis 1, that the number of years worked in one's current position is positively associated with burnout but not with STS. While hypothesis 2 predicted that work with non-trauma clients would be positively related to burnout and not STS, the association between the number of hours of non-trauma counseling and burnout is weak, at best. On the other hand, the results provide strong support for Hypothesis 3 that the number of hours chaplains spend per week with traumatized patients is positively related to STS. This finding supports the contention that working with traumatized clients takes a unique toll on helpers.

Hypothesis 4 predicted that social support from both co-workers and family members would be negatively associated with burnout and STS. Social support from family and friends was inversely related to burnout and STS, but support from co-workers was found to be only weakly related to burnout and unrelated to STS.

## Discussion

The current study examined the association of social support and several work-related variables with symptoms of burnout and STS. Regression analyses found the number of years chaplains had worked in their current position was the strongest predictor of burnout and that the number of hours chaplains worked with traumatized patients per week was the strongest predictor of STS. Overall, social support was inversely related to burnout and

**Table 2** Standardized regression coefficients for variables in models of burnout and secondary traumatic stress

|                                     | Burnout |                  |                   | Secondary Traumatic Stress |         |         |
|-------------------------------------|---------|------------------|-------------------|----------------------------|---------|---------|
|                                     | Model 1 | Model 2          | Model 3           | Model 1                    | Model 2 | Model 3 |
| Age                                 | -.14**  | -.15**           | -.18**            | -.01                       | .01     | -.01    |
| Gender (female = 1)                 | -.14**  | -.14*            | -.13*             | .00                        | -.01    | -.01    |
| Education                           | -.05    | -.02             | -.01              | -.15**                     | -.13*   | -.12*   |
| Years of experience                 | .02     | .03              | .02               | -.08                       | -.07    | -.05    |
| Work site (hospital = 1)            | .04     | .04              | .05               | -.03                       | -.04    | -.04    |
| Years in current position           |         | .22**            | .20**             |                            | .14     | .11     |
| Non-trauma counseling hours         |         | .11 <sup>†</sup> | .07               |                            | .07     | .06     |
| Trauma counseling hours             |         | .06              | -.02              |                            | .13*    | .13*    |
| Support from supervisors/co-workers |         |                  | -.10 <sup>†</sup> |                            |         | -.02    |
| Support from family/friends         |         |                  | -.18***           |                            |         | -.13*   |
| R <sup>2</sup>                      | 0.04    | 0.07             | 0.12              | 0.03                       | 0.06    | 0.07    |

<sup>†</sup>  $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$  (2-tailed).

STS, but some sources of social support were significantly related to burnout whereas others were not.

### Work-related variables

Since burnout and STS have been conceptualized as somewhat related but distinctly different phenomena (Figley 1995; McCann and Pearlman 1990; Thomas and Wilson 2004), we designed the study to compare the differential association of certain work-related variables with burnout and STS. Of particular interest were differences between burnout and STS with respect to long-term sources of occupational stress, as measured by years in current position, and more immediate occupational stressors, as measured by the number of hours that chaplains worked each week with different kinds of clients (traumatized or non-traumatized).

Our findings are consistent with past research indicating that years of work in one's current position is positively associated with burnout (e.g., Maslach and Florian 1988; Vredenburg et al. 1999), as predicted by Hypothesis 1. This hypothesis was based on the notion that institutional policies and practices can strain personal resources, such as self-esteem, over time, because they impinge on personal autonomy. Since STS appears to develop rather rapidly, Hypothesis 1 further predicted that STS would not be related to years in current position nor to the institutional factors that are presumably captured by this measure. While no significant association between STS and years in current position was found, there was a non-significant association between the two variables, leaving open the question of whether the institutional variables that contribute to burnout might also contribute to STS to some extent.

Hypothesis 2 predicted that burnout—but not STS—would be related to hours worked with non-traumatized clients, whereas Hypothesis 3 predicted that STS—but not burnout—would be related to hours worked with traumatized clients. The results offer only weak support for Hypothesis 2. However, about half of the chaplains in our sample reported a total of 20 counseling hours or fewer each week, which suggests that hours of counseling may not be an adequate measure of the amount of time they spend in direct care with patients.

The findings provide convincing support for Hypothesis 3. Similar to the findings of Kassam-Adams (1999), STS was directly related to the amount of time participants spent counseling traumatized clients but not to the amount of time they spent counseling other clients. These findings support the contention of other researchers and clinicians that working with traumatized clients can have unique negative consequences on psychological well-being (Figley 1995; McCann and Pearlman 1990). Interestingly, although chaplains working in hospitals were not more prone to STS, they were more likely to spend more time per week working with traumatized clients.

### Social support variables

We hypothesized that social support would be associated with lower levels of both burnout and STS (Hypothesis 4). The models showed that support from family/friends were significantly and inversely related to burnout and STS, as expected. However, the models found no significant association between support from supervisors or co-workers for either dependent variable, although its association with burnout approached significance.

Part of the reason that social support from supervisors/co-workers was only weakly related to burnout may be that chaplains have very few colleagues from their own

profession at their work-sites, and their supervisors are often in other disciplines. The chaplaincy or pastoral care department in hospitals and other healthcare facilities is usually quite small considering the number of total patients in a given hospital. National surveys have found that the average size of pastoral care departments is about three chaplains, and many consist of just one chaplain (Flannelly et al. 2004; VandeCreek et al. 2001). Hence, chaplains typically have few co-workers in their own profession to provide social support. Moreover, a recent study showed that chaplains and other healthcare professionals disagree about the role of chaplains in hospitals (Flannelly et al. 2005a, b). Because of this, co-workers in other professional disciplines may not be a very good source of social support for chaplains.

### Demographic variables

The findings indicate that women and older people in our sample are less likely to exhibit burnout. The association between age and STS is not surprising given past research (Brewer and Shapard 2004). Based on our model, we would expect the observed relationship to reflect increased self-efficacy and/or self-esteem among older chaplains. This may also be true of women, but we do not have a rationale for why this would be the case.

Although education had no significant effect on symptoms of burnout, it was negatively associated with traumatic symptomology. In their study of trauma therapists, Pearlman and MacLan (1995) found that regardless of one's income, those with master's degrees reported more psychological distress than did those with doctoral training. The authors highlight a number of factors that may have separated these two groups. For instance, they posit that those with more education may have developed a more nuanced theoretical framework that guides them in their work, may have had better supervision, or may have had more effective ways of managing therapeutic boundaries. However, they also allow for the fact that self-selection factors dictating the choice to enter into higher education may account for these group differences. In a related finding, Ortlepp and Friedman (2002) found that counselors' perceptions of the "effectiveness" of their training significantly impacted their feelings of efficacy in the trauma counseling context.

### Future directions

As indicated by the research design, data for this study present a cross-sectional account. While our data revealed a general association, it remains impossible to ascertain whether burnout and vicarious trauma have a directional influence on each other. For instance, STS may set the stage for burnout, or the two syndromes may have an additive effect on each other. We suspect that a longitudinal study will reveal the direction of influence.

Both burnout and secondary trauma call our attention to those occupations that necessitate compassion as a job function. Through the compassionate endeavor one person frequently inhabits and takes on the emotions of the other. "Bearing witness to the suffering of others" (Figley 2002b, p. 143) inherently challenges the mental, physical, and emotional faculties of the person in contact with suffering persons. We would surmise that variations in degrees of empathy should be associated with varying degrees of symptoms of burnout and secondary trauma. Since theorists and researchers have expressed the belief that empathy is the common factor related to a person's vulnerability for both burnout and STS, it is surprising that research on empathy has not been conducted in relation to these phenomena.

## Conclusions

The current pattern of results suggests an overall beneficial impact of being able to rely on friends and family during difficult times. The perception that others can and will provide necessary resources may bolster one's perceived ability to cope with job demands. Support may reduce stress through a number of mechanisms, such as by altering the appraisal stressors, changing coping patterns, or affecting self-perceptions.

More broadly, our results highlight the need for therapists and counselors to be attuned to not only their clients but also to their own inner dynamics. Without an understanding of the impact of counseling on the professional, both therapists and clients are vulnerable (McCann and Pearlman 1990). Pearlman and Saakvitne (1995) caution that counselors who ignore the long-term effects of their work on their spiritual and physical well-being, caring for others without properly caring for themselves, may work beyond the limits of their personal resources. If professionals are unable to mitigate the deleterious effects of their work on themselves, they themselves are more open to burnout and vicarious trauma. Understanding the effects on themselves of caring for clients is particularly important for those who work with trauma victims, since clients are vulnerable to re-injury by therapists who do not understand their own responses to their clients (Armsworth 1989).

There are a number of limitations to the current study. First, a convenient sample was used, and there may be differences between chaplains who attended the conference and those who did not, which could bias the results. However, the conference was attended by chaplains from all five chaplain organizations in the United States along with the chaplain association of Canada. Thus, we expect attendees to be a fairly representative sample of professional chaplains. Though the measures of burnout and secondary trauma are well validated, self-report measures may be problematic because of the possibility of respondents giving socially desirable responses and lacking clinical objectivity.

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## References

- Ackerley, G. D., Burnell, J., Holder, D. C., & Kurdek, L. A. (1988). Burnout among licensed psychologists. *Professional Psychology: Research and Practice*, 19(6), 624–631.
- Ahola, K., Honkonen, T., Isomets, E., Nykyri, E., Aromaa, A., & Lonnqvist, J. (2005). The relationship between job-related burnout and depressive disorders: results from the Finnish health 2000 study. *Journal of Affective Disorders*, 88(1), 55–62.
- Armsworth, M. W. (1989). Therapy of incest survivors: abuse or support? *Child Abuse and Neglect*, 13, 549–562.
- Baird, S., & Jenkins, S. R. (2003). Vicarious traumatization, secondary traumatic stress, and burnout in sexual assault and domestic violence agency staff. *Violence and Victims*, 18(1), 71–86.
- Baruch-Feldman, C., Brondolo, E., Ben-Dayana, D., & Schwartz, J. (2002). Sources of social support and burnout, job satisfaction, and productivity. *Journal of Occupational Health Psychology*, 7(1), 84–93.
- Beehr, T. A., Farmer, S. J., Glazer, S., Gudanowski, D. M., & Nair, V. N. (2003). The enigma of social support and occupational stress source congruence and gender role effects. *Journal for Occupational Health Psychology*, 8(3), 220–231.
- Bell, H., Kulkarni, S., & Dalton, L. (2003). Organizational prevention of vicarious trauma. *Families in Society*, 84(4), 463–470.
- Bowen, M. (1978). *Family therapy in clinical practice*. New York: Jason Aaronson.

- Boscarino, J. A., Figley, C. R., & Adams, R. E. (2004). Compassion fatigue following the September 11 terrorist attacks: a study of trauma among New York City social workers. *International Journal of Emergency Mental Health*, 6, 57–66.
- Brewer, E. W., & Shapard, L. (2004). Employee burnout: a meta-analysis of the relationship between age or years of experience. *Human Resource Development Review*, 3, 102–123.
- Byrne, B. M. (2001). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Mahwah: Lawrence Erlbaum Associates.
- Chrestman, K. R. (1999). Secondary exposure to trauma and self-reported distress among therapists. In H. B. Stamm (Ed.), *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators* (2nd ed., pp. 29–36). Lutherville: Sidran Press.
- Coady, C. A., Kent, V. D., & Davis, P. W. (1990). Burnout among social workers working with patients with cystic fibrosis. *Health & Social Work*, 15, 116–124.
- Cohen, S., Doyle, W. J., Skoner, D. P., Rabin, B. S., & Gwaltney, J. M. (1997). Social ties and susceptibility to the common cold. *Journal of the American Medical Association*, 277, 1940–1944.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310–357.
- Cordes, C. L., & Dougherty, T. W. (1993). A review and intergration of research on job burnout. *Academy of Management Review*, 18, 621–656.
- Daniels, K., & Guppy, A. (1997). Stressors, locus of control, and social support as consequences of affective psychological well-being. *Journal of Occupational Health Psychology*, 2(2), 156–174.
- Davidson, J. R. T., & Fairbank, J. A. (1993). The epidemiology of post-traumatic stress disorder. In J. R. T. Davidson & E. B. Foa (Eds.), *Post-traumatic stress disorder: DSM-IV and beyond* (pp. 147–169). Washington: American Psychiatric Press.
- Dupree, P. I., & Day, H. D. (1995). Psychotherapists' job satisfaction and job burnout as a function of work setting and percentage of managed care clients. *Psychotherapy in Private Practice*, 14(2), 77–92.
- Dutton, M. A., & Rubinstein, F. L. (1995). Working with people with PTSD: research implications. In C. R. Figley (Ed.), *Compassion fatigue: coping with secondary stress disorder in those who treat the traumatized*. Bristol, PA: Brunner/Mazel.
- Farber, B. A., & Heifetz, L. J. (1982). The process and dimensions of burnout in psychotherapists. *Professional Psychology*, 13(2), 293–301.
- Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C. R. Figley (Ed.), *Compassion fatigue: coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 1–20). New York: Brunner/Mazel.
- Figley, C. R. (2002a). Compassion fatigue: Psychotherapists' chronic lack of self care. *Psychotherapy in Practice*, 58(11), 1433–1441.
- Figley, C. R. (Ed.). (2002b). *Treating compassion fatigue*. New York: Brunner-Routledge.
- Flannelly, K. J., Weaver, A. J., & Handzo, G. F. (2003). A three-year study of chaplains' professional activities at Memorial Sloan Kettering Cancer Center in New York City. *Psycho-oncology*, 12, 760–768.
- Flannelly, K. J., Handzo, G. F., & Weaver, A. J. (2004). Factors affecting healthcare chaplaincy and the provision of pastoral care in the United States. *Journal of Pastoral Care & Counseling*, 58(1–2), 127–130.
- Flannelly, K. J., Galek, K., Bucchino, J., Handzo, G. F., & Tannenbaum, H. P. (2005a). Department directors' perceptions of hospital chaplains: A national survey. *Hospital Topics*, 83(4), 19–27.
- Flannelly, K. J., Roberts, S. B., & Weaver, A. J. (2005b). Correlates of compassion fatigue and burnout in chaplains and other clergy who responded to the September 11th attacks in New York City. *Journal of Pastoral Care & Counseling*, 59(3), 231–224.
- Fogg, S. L., Flannelly, K. J., Weaver, A. J., & Handzo, G. (2004). An analysis of referrals to chaplains in a community hospital in New York over a seven-year period. *Journal of Pastoral Care & Counseling*, 58(3), 225–235.
- Frese, M. (1999). Social support as a moderator of the relationship between work stressors and psychological dysfunctioning. *Journal of Occupational Health Psychology*, 4(3), 179–192.
- Friesen, D., & Sarros, J. C. (1989). Sources of burnout among educators. *Journal of Organizational Behavior*, 10(2), 179–188.
- Greenglass, E. R., Fiksenbaum, L., & Burke, R. J. (1994). The relationship between social support and burnout over time in teachers. *Journal of Social Behavior and Personality*, 9(2), 219–230.
- Greenglass, E., Fiksenbaum, L., & Burke, R. J. (1996). Components of social support, buffering effects and burnout: implications for functioning. *Anxiety, Stress & Coping*, 9(3), 185–197.
- Greenglass, E. R., Burke, R. J., & Konarski, R. (1997). The impact of social support on the development of burnout in teachers: examination of a model. *Work and Stress*, 11(3), 267–278.
- Grosch, W., & Olsen, D. (2000). Clergy burnout: an integrated approach. *Journal of Clinical Psychology*, 56(5), 619–632.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptations. *Review of General Psychology*, 6(4), 307–324.

- Huebner, E. S. (1994). Relationships among demographics, social support, job satisfaction and burnout in school psychologists. *School Psychology International*, 15(2), 181–186.
- Jenkins, S. R., & Baird, S. (2002). Secondary traumatic stress and vicarious trauma: a validation study. *Journal of Traumatic Stress*, 15(5), 423–432.
- 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.
- Kalliath, J., & Beck, A. (2001). Is the path to burnout and turnover paved by a lack of supervisory support? A structural equations test. *New Zealand Journal of Psychology*, 30(2), 72–78.
- Kassam-Adams, N. (1999). The risks of treating sexual trauma: Stress and secondary trauma in psychotherapists. In H. B. Stamm (Ed.), *Secondary traumatic stress: self-care issues for clinicians, researchers, and educators* (2nd ed., pp. 37–48). Lutherville: Sidran Press.
- Lerias, D., & Byrne, M. K. (2003). Vicarious traumatization: symptoms and predictors. *Stress and Health*, 19, 129–138.
- Lewandowski, C. (2003). Organizational factors contributing to worker frustration: the precursor to burnout. *Journal of Sociology and Social Welfare*, 30(4), 175–185.
- Maslach, C. (1982). Understanding burnout: Definitional issues in analyzing a complex phenomenon. In W. S. Paine (Ed.), *Job stress and burnout: Research, theory and intervention perspectives* (pp. 29–40). Beverly Hills: Sage.
- Maslach, C., & Leiter, M. P. (1997). *The truth about burnout: How organizations can cause personal stress and what to do about it*. San Francisco: Jossey-Bass.
- Maslach, C. (2003). Job burnout: new directions in research and intervention. *Current Directions in Psychological Science*, 12(5), 189–192.
- Maslach, C., & Jackson, S. E. (1981). *Maslach burnout inventory manual*. Palo Alto: Consulting Psychologists Press.
- Maslach, C., & Jackson, S. E. (1982). Burnout in health professions: A social psychological analysis. In G. Sanders & J. Suls (Eds.), *The social psychology of health and illness* (pp. 227–251). Hillsdale: Lawrence Erlbaum Associates.
- Maslach, C., & Florian, V. (1988). Burnout, job setting, and self-evaluation among rehabilitation counselors. *Rehabilitation Psychology*, 33(2), 85–93.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Reviews, Psychology*, 52, 397–422.
- McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: a framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress*, 3, 131–149.
- Miller, A. (1979). The drama of the gifted child and the psychoanalyst's narcissistic disturbance. *International Journal of Psychoanalysis*, 60, 47–58.
- Moran, M., Flannelly, K. J., Weaver, A. J., Overvold, J. A., Hess, W., & Wilson, J. C. (2005). A study of pastoral care, referral, and consultation practices among clergy in four settings in the New York City area. *Pastoral Psychology*, 53, 255–266.
- Ortlepp, K., & Friedman, M. (2002). Prevalence and correlates of secondary traumatic stress in workplace lay trauma counselors. *Journal of Traumatic Stress*, 15(3), 213–222.
- Overvold, J. A., Weaver, A. J., Flannelly, K. J., & Koenig, H. G. (2005). A study of religion, ministry, and meaning in caregiving among health professionals in an institutional setting in New York City. *Journal of Pastoral Care and Counseling*, 59, 225–235.
- Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist*. New York: W. W. Norton.
- Pearlman, L. A., & Maclan, 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.
- Pines, A., & Maslach, C. (1978). Characteristics of staff burnout in mental health settings. *Hospital & Community Psychiatry*, 29(4), 233–237.
- Prosser, D., Johnson, S., Kuipers, E., Dunn, G., Szmukler, G., Reid, Y., et al. (1999). Mental health, “burnout” and job satisfaction in a longitudinal study of mental health staff. *Social Psychiatry and Psychiatric Epidemiology*, 34(6), 295–300.
- Reid, Y., Johnson, S., Morant, N., Kuipers, E., Szmukler, G., Thornicroft, G., et al. (1999). Explanations for stress and satisfaction in mental health professionals: a qualitative study. *Social Psychiatry and Psychiatric Epidemiology*, 34, 301–308.
- Roberts, S. B., Flannelly, K. J., & Figley, C. R. (2003). Compassion fatigue among chaplains, clergy, and other respondents after September 11th. *Journal of Nervous and Mental Disease*, 191(11), 756–758.
- Rosenbloom, D. J., Pratt, A. C., & Pearlman, L. A. (1999). Helpers' response to trauma work: Understanding and intervening in an organization. In B. H. Stamm (Ed.), *Secondary traumatic stress: Self-care issues for clinicians, researchers and educators* (2nd ed.). Lutherville: Sidran Press.
- Ross, R. R., Altmair, E. M., & Russell, D. W. (1989). Job stress, social support, and burnout among counseling center staff. *Journal of Counseling Psychology*, 36(4), 464–470.



- Sarason, I. G., Sarason, B. R., Shearin, E. N., & Pierce, G. R. (1987). A brief measure of social support: practical and theoretical implications. *Journal of Social and Personal Relationships*, 4, 497–510.
- Schauben, L. J., & Frazier, P. A. (1995). Vicarious trauma: the effects on female counselors of working with sexual violence. *Psychology of Women Quarterly*, 19(1), 49–64.
- Shinn, M., Rosario, M., Morch, H., & Chestnut, D. E. (1984). Coping with job stress and burnout in the human services. *Journal of Personality and Social Psychology*, 46(4), 864–876.
- Thomas, R. B., & Wilson, J. P. (2004). Issues and controversies in the understanding and diagnosis of compassion fatigue, vicarious traumatization, and secondary traumatic stress disorder. *International Journal of Emergency Mental Health*, 6(2), 81–92.
- Weiner, W. (1989). Is burnout an institutional syndrome? *Loss, Grief & Care*, 3, 95–100.
- Willcock, S. M., Daly, M. G., Tenant, C. C., & Allard, B. J. (2004). Burnout and psychiatric morbidity in new medical graduates. *Medical Journal of Australia*, 182(7), 357–360.
- VandeCreek, L., Siegel, S., Gorey, E., Brown, S., & Toperzer, R. (2001). How many chaplains per 100 inpatients? Benchmarks of health care chaplaincy. *Journal of Pastoral Care*, 55(3), 289–301.
- Vermeulen, M., & Mustard, C. (2000). Gender differences in job strain, social support at work, and psychological distress. *Journal of Occupational Health Psychology*, 5(4), 428–440.
- Vredenburgh, L. D., Carlozzi, A. F., & Stein, L. B. (1999). Burnout in counseling psychologists: type of practice setting and pertinent demographics. *Counseling Psychology Quarterly*, 12(3), 293–302.