Secondary Traumatic Stress Among Child Protective Service Workers: Prevalence, Severity and Predictive Factors

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ABSTRACT

This study assesses the prevalence and severity of secondary traumatic stress (STS) symptoms among a sample of southern child protective service (CPS) workers. Using a survey research design, up to 37% of the respondents were found to be experiencing clinical levels of emotional distress associated with STS. In addition, levels of work exposure and work related personal trauma were found to be strongly associated with the presence of those symptoms. Preventive and interventive strategies to address these findings are suggested.


Introduction

Every day innocent children are physically abused, sexually assaulted, and neglected by their caretakers. Estimates suggest that approximately one million children are severely physically harmed by family members in the United States annually (NCCAN, 1996). Because of the nature of these distressing events, abuse victims often experience trauma reactions that require swift and decisive interventions to help the children heal and grow beyond these horrible experiences.

In the United States, innovative laws were passed during the 19th century recognizing the responsibility of society to protect and care for children who have been traumatized within their families. All fifty states now provide some level of services to protect children from further traumatizing events. In every state, Child Protective Service (CPS) workers intervene directly with children to protect them from further trauma and to help them recover from the abuse that they have already experienced. Daily, these CPS workers face the trauma experienced by these children.
Until recently, it was thought that trauma workers, because of their special training, were immune to traumatic stress reactions and symptoms. In 1978, Figley suggested that family, friends, and professionals are susceptible to developing traumatic stress symptoms from being empathetically engaged with victims of traumatic events. Since then, several authors (Beaton & Murphy, 1995; Danieli, 1985; Dunning & Silva, 1980; Dyregrov & Mitchell, 1992; Eth & Pynoos, 1985; Gersons, 1989; Hartsough & Meyers, 1985; Herman, 1988; Hodgkinson & Shepherd, 1994; Lundin, 1995; McCann & Pearlman, 1989; McFarlane, 1986; Miller, Stiff, & Ellis, 1988; Munroe, 1990; NiCathy, Merriam, & Coffman, 1984; O'Rear, 1992; Pearlman & Saakvitine, 1995; Pynoos & Nadar, 1988; Raphael, Singh, Bradbury, & Lambert, 1984; Remer & Elliot, 1988a, 1988b; Stamm, 1995; Utterback & Caldwell, 1989) have argued that traumatic stress symptoms are contagious and can produce similar effects in those who work with trauma victims.

The phenomenon of learning about another's traumatic ordeal and, in the process, experiencing traumatic stress is what Figley (1995a) refers to as Secondary Traumatic Stress (STS). STS is defined as "the natural, consequent behaviors and emotions resulting from knowledge about a traumatizing event experienced by a significant other. It is the stress resulting from helping or wanting to help a traumatized or suffering person" (Figley, 1995b, p. 10). The pathological response of being exposed to another's trauma is called Secondary Traumatic Stress Disorder (STSD). STSD is "a syndrome of symptoms nearly identical to Post Traumatic Stress Disorder except that exposure to knowledge about a traumatizing event is associated with the set of STSD symptoms" (Figley, 1995a, p. 8). STS symptoms or STSD can occur when a system of at least two people is formed, one of whom has been traumatized and one who wants to help. Therefore, families, friends, mental health professionals, and others who work with traumatized people are vulnerable to STS symptoms and STSD.

According to Figley's (1995a) Secondary Traumatic Stress (STS) theory, persons who work directly with or have direct exposure to trauma victims on a regular basis are just as likely as the primary victims to experience traumatic stress symptoms and disorders. "People can be traumatized without actually being physically harmed or threatened with harm. They can be traumatized simply by learning about the traumatic event" (p.4). Furthermore, Figley recognized that persons who are exposed to traumatized children are especially vulnerable to the noxious side effects of STSD.

Other authors have studied and written about the effects of caring for trauma victims (e.g., Hartsough and Myers, 1985; Remer & Elliot, 1998a, 1988b; Miller et al., 1988; and NiCathy, et al., 1984). Pearlman and Saakvitine (1995) suggest that therapists who are exposed to "graphic descriptions of violent events, realities of people's cruelty to one another, and trauma related re-enactments" (p.31) may suffer from vicarious traumatization. "Vicarious traumatization is a process through which the therapist's inner experience is negatively transformed through empathic engagement with clients' trauma material" (p. 279). Stamm (1995) proposes "care giving can be a stressful experience that may produce a situation ripe for a traumatic stress response that may or may not lead to a traumatic stress disorder" (p. xviii).

Studies concerning secondary exposure to traumatic material have focused primarily on the traumatization of crisis workers (i.e., paramedics, firefighters, emergency medical technicians, police officers, rescue workers, disaster response teams) and psychotherapists. CPS workers, however, are just as likely as crisis workers and psychotherapists to be directly exposed to a number of children's traumas and personal traumas on a daily basis throughout their careers.
While interviewing child abuse victims or reading case files, CPS workers learn graphic
details of violent events and are forced to acknowledge cruelty to children in society. While
investigating reported abuse, workers are often placed in compromising situations that result
in physical harm or threatened harm, thus further increasing their exposure to traumatic
stressors. Therefore, it seems that CPS workers would be at least as vulnerable as other types
of trauma workers to suffer from secondary traumatic stress symptoms. This study examines
the effects of working with these traumatized children.

Review Of Literature

Research in the area of secondary trauma has produced several generalizations about the
effect of working with traumatized persons. First, professionals who work with traumatized
persons can exhibit the same range of symptoms as victims. Second, the longevity and
severity of these symptoms will vary with the individual. Third, professionals working with
trauma victims are more likely to exhibit symptoms if they have been personally traumatized
than if they have not had that experience. Finally, female trauma workers are more likely to
exhibit secondary trauma symptoms than their male colleagues. This section summarizes the
studies that have examined these four areas.

First, researchers have found that professionals exposed to traumatic material experience
the same array of traumatic stress symptoms as those reported by victims of traumatic events
(Beaton & Murphy, 1995; Dunning & Silva, 1980; Dyregrov & Mitchell, 1992; Gersons,
1989; Hodgkinson & Shepherd, 1994; Horowitz, 1974; Lundin, 1995; O'Rear, 1992; Raphael
et al., 1984). Disturbed sleep, anger, fear, suppression of emotions, nightmares, flashbacks,
irritability, anxiety, alienation, feelings of insanity, loss of control, and suicidal thoughts have
been experienced by crisis workers and therapists following exposure to trauma victims.

Second, a number of researchers have reported that similar to primary victims, the longevity
and severity of symptoms professionals experience varies from person to person. In
particular, researchers have found a positive correlation between longevity of career, large
caseloads, increased contact with clients, and long work hours and the longevity and severity
of STS symptoms (Beaton & Murphy, 1995; Bryant & Harvey, 1996; Chrestman, 1995;
Dunning & Silva, 1980; Follette, Polusny, & Milbeck, 1994; Harvey, 1996; McCarroll,
Ursone, & Fullerton, 1993; Hodgkinson & Shepherd, 1994; Marmar, Weiss, Meltzler,
Ronfeldt, & Foreman, 1996; Moran & Britton, 1994; Munroe, 1990; Pearlman, 1995;
Wilkinson, 1983). For example, in her study of distress among therapists who were indirectly
exposed to trauma, Chrestman (1995) reported a relationship between increased professional
experience, the number of clients in therapists' caseloads, and increased STS symptoms. She
also reported a relationship between higher percentages of time spent at work and an increase
in avoidance symptoms in therapists. Similarly, in Hodgkinson & Shepherd's (1994) study of
British social workers who provided support to primary victims of the Piper Alpha North Sea
Oil platform explosion, the authors found a significant relationship between the number of
years on the job and symptomatology. In their study of police officers, firefighters,
paramedics, emergency medical technicians, and California highway department workers who
responded to the Loma Prieta earthquake, Marmar et al. (1996) found working long shifts with
few breaks and harsh climactic conditions were associated with greater depersonalization,
memory disturbances, altered body image experiences, and an altered time sense in workers.

Third, factors other than exposure have also been found to have an impact on the severity of
STS symptoms in workers. Researchers have determined that workers who have experienced
a personal trauma are more likely to suffer from severe STS symptoms than workers who did not have a personal trauma history (Follette et al., 1994; Kassam-Adams, 1995; Marmar et al., 1996; Moran & Britton, 1994; Pearlman & Saakvitne, 1995; Schauben & Frazier, 1995). Moran and Britton (1994) surveyed 210 Australian State Emergency Services and Volunteer Bushfire Brigade Unit workers. The authors reported that workers who had a personal trauma history experienced higher levels of STS symptoms after responding to disasters than those without a trauma history. Kassam-Adams (1995) reported a relationship between therapists' personal trauma history and severity of STS symptoms while Follette et al., (1994) determined both mental health and law enforcement professionals with personal trauma histories had significantly higher levels of trauma-specific symptoms than professionals not reporting prior traumas.

Finally, symptoms of Post Traumatic Stress Disorder have been found to be more prevalent among female rather than male trauma workers and other professionals (Kassam-Adams, 1995; McCarroll, Ursano, Fullerton, & Lundy, 1993; Martin, McKeans, & Velkamp, 1986). In a study of psychotherapists who treat sexual trauma victims, Kassam-Adams (1995) noted that female therapists reported greater PTSD symptoms than male therapists. Likewise, in a study of Operation Desert Storm (McCarroll et al., 1993), female soldier mortuary workers also reported higher levels of distress than males. Similarly, female police officers were found to be more likely to report symptoms than male officers (Martin et al., 1986).

**Research Questions.** Given the current knowledge about the influences of exposure, personal history and gender, the following research questions need to be addressed: first, to what extent do CPS workers exhibit symptoms consistent with those of STS; and second, to what extent are those symptoms explained by exposure to others' trauma, personal history of trauma, and gender? In the following section, the methodology of the study will first be presented, followed by the results of the tests to answer the above questions.

**Method**

**Participants.**

The population for this study included 360 child protective service (CPS) workers in a southern state. CPS workers are those who investigate child abuse and neglect reports, provide ongoing services to abused and/or neglected children, and place children in foster care and adopted homes when necessary. Three hundred and sixty questionnaires were sent to CPS workers and 57% (n=205) were completed and returned. Of these respondents, 183 participants had worked in Child Protective Services for one year or more and 22 had worked in the field less than one year. A comparison of these two groups revealed no significant differences between the groups with regard to demographic characteristics (see Table 1). Since STS is a condition that results from exposure to others' trauma, only those participants who had experienced exposure through continued employment would be expected to exhibit those symptoms. For the purposes of this study, only those 183 participants who had worked for more than one year were included in the final sample. Eighty-two percent (n=150) of the participants (n=183) were female and 17% (n=31) were male. Sixty-seven percent (n=122) of the participants reported they were Caucasian, 30.8% (n=56) stated they were African American, and 2.1% (n=4) described themselves as "other."
Table 1. Demographic Characteristics of Participants employed more (n=183) and less than one year (n=22)

<table>
<thead>
<tr>
<th></th>
<th>One year or more (N=183) Mean or %</th>
<th>Less than 1 year (N=22) Mean or %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>37.6 (SD=9.7)</td>
<td>34.5 (SD=8.9)</td>
</tr>
<tr>
<td>Gender (female)</td>
<td>82.4% (n=150)</td>
<td>90.9% (n=20)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>30.8% (n=56)</td>
<td>13.6% (n=3)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>67% (n=122)</td>
<td>86.4% (n=19)</td>
</tr>
<tr>
<td>Other</td>
<td>2.1% (n=4)</td>
<td>***</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed H.S.</td>
<td>1.6% (n=3)</td>
<td>***</td>
</tr>
<tr>
<td>Some College</td>
<td>7.1% (n=13)</td>
<td>13.6% (n=3)</td>
</tr>
<tr>
<td>Four Year Degree</td>
<td>55.2% (n=101)</td>
<td>63.6% (n=14)</td>
</tr>
<tr>
<td>Some Grad. Work</td>
<td>18.6% (n=34)</td>
<td>18.2% (n=4)</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>17.5% (n=32)</td>
<td>4.5% (n=1)</td>
</tr>
<tr>
<td>BS Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>9.4% (n=13)</td>
<td>31.6% (n=6)</td>
</tr>
<tr>
<td>Psychology</td>
<td>16.7% (n=23)</td>
<td>10.5% (n=2)</td>
</tr>
<tr>
<td>Social Work</td>
<td>7.2% (n=10)</td>
<td>15.8% (n=3)</td>
</tr>
<tr>
<td>Sociology</td>
<td>17.4% (n=24)</td>
<td>5.3% (n=1)</td>
</tr>
<tr>
<td>Other</td>
<td>21.7% (n=30)</td>
<td>21.1% (n=4)</td>
</tr>
<tr>
<td>None</td>
<td>10.9% (n=15)</td>
<td>15.8% (n=3)</td>
</tr>
<tr>
<td>Master's Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counseling</td>
<td>5.1% (n=9)</td>
<td>4.5% (n=1)</td>
</tr>
<tr>
<td>Social Work</td>
<td>0.6% (n=1)</td>
<td>***</td>
</tr>
<tr>
<td>Sociology</td>
<td>1.7% (n=3)</td>
<td>***</td>
</tr>
<tr>
<td>Other</td>
<td>9.6% (n=17)</td>
<td>***</td>
</tr>
<tr>
<td>None</td>
<td>83.0% (n=146)</td>
<td>95.5% (n=21)</td>
</tr>
</tbody>
</table>

Their ages ranged from 23 to 60 years with a mean of 37.6 years. Fifty-five percent (n=101) reported they had completed four years of college and 36% (n=66) reported having had "some graduate work" or a Master's degree. Sociology and psychology were the most frequently reported Bachelor's degrees (34%; n=47) while counseling (5.1%; n=9) was the most frequently reported Master's degree.

Measures.

Data for this study were collected using a survey research design using a written questionnaire. The questionnaires tapped areas of secondary trauma, personal and family characteristics, and information related to current and historical work experiences. In addition, the questionnaire requested information about demographic characteristics.
Dependent Variable - Secondary Traumatic Stress Symptoms

Two instruments that have been widely used in a variety of clinical and non-clinical samples measured the severity of workers' secondary traumatic stress symptoms. At the time of this study, the Brief Symptom Inventory (BSI) (Derogatis, 1975) and the Impact of Event Scale-Revised (IES-R) (Weiss & Marmar, 1997) were selected because there were no measures available to specifically assess secondary traumatic stress symptoms. Since that time, Figley (1995a) has developed a Compassion Fatigue Self Test for Psychotherapists and a Compassion Satisfaction/Fatigue Self Test for Practitioners (Figley, in press).

The Impact of Event Scale-Revised (IES-R) by Weiss & Marmar (1997) was used to assess specific secondary traumatic stress symptoms. This measure has been reported to have internal consistency of approximately .87 for the Intrusion subscale, .85 for the Avoidance subscale, and .79 for the Hyperarousal subscale (Marmar et al., 1996; Weiss, Marmar, Metzler, & Ronfeldt, 1995). In both the original and revised versions of the Impact of Events Scale, the measure provides an excellent approach to acquiring an appreciation of the distress of the respondents. Although this measure has been used consistently to identify distress in a wide variety of populations (Alexander, 1993; Alexander & Wells, 1991; Bryant & Harvey, 1996; Chrestman, 1995; Figley, 1988; Horowitz, Wilner, & Alvarez, 1979; Kassam-Adams, 1995; Ludin & Bodegard, 1993; Munroe, 1990; Robinson, Sigman, & Wilson, 1997; Schwarzwald, Solomon, Weisenberg, & Mikulincer, 1987; Solomon, 1989; Ursano, Fullerton, Kao, & Bhartiya, 1995; Waters, Selander, & Stuart, 1992; Zilberg, Weiss, & Horowitz, 1982) there has been no agreement about what level of distress qualifies a respondent for a diagnosis of PTSD or STS (Wilson & Keane, 1997). This measure will be used to identify differences between respondents with regard to the level of distress reported.

The shortened version of the SCL-90-R, the Brief Symptom Inventory (BSI) by Derogatis (1975) was used to assess general psychological symptoms in the CPS workers. Reliability estimates for the nine symptom subscales and three global indices of the BSI were confirmed by internal consistency and test-retest analyses (Derogatis, 1993). Alpha coefficients for the nine subscales ranged from a low of .71 on the Psychoticism subscale to a high of .85 on the Depression subscale. The test-retest coefficients ranged from .68 for Somatization to .91 for Phobic Anxiety. The Global Severity Index revealed a stability coefficient of .90, indicating that the BSI is a consistent measurement across time.

These two instruments were selected primarily because of their extensive use in the measurement of traumatized people and because of their low demand characteristics. They are both brief and easily self-administered.

Independent Variables

This study focuses on the relationship between symptoms of STS and variables that are associated with a cumulative stress effect. The independent variables of interest include both personal characteristics and factors associated with the work.

Personal Traumatic Events NOT Work Related. CPS workers were asked to disclose if they had ever experienced, witnessed, or been confronted with a traumatic event prior to working in the CPS field. A list of traumatic events taken from the DSM-IV (APA, 1994) was provided for the worker to check yes or no according to their experience.

Personal Traumatic Events In The Line Of Duty. In addition to having experienced trauma in their lives separate from their work, some workers may have experienced personal harm in the line of their work. In order to understand the impact of their work experiences, workers
were asked to report if, and how many times, they had been assaulted while on the job.

Duration and Intensity of Exposure to Children's Traumatic Material. Participants were asked a series of questions that were designed for this study to determine the duration and intensity of exposure to children's traumata. In order to measure the duration of exposure to children's trauma, workers were asked to briefly describe their job and to estimate the length of time employed in their current position. The intensity of exposure to children's trauma was determined by asking participants to estimate the average number of hours they work per week. Workers were also asked to estimate their average caseload size for the past month.

Procedure.

Letters were sent to the Department of Family and Children Services directors in 92 counties in a large southern state requesting permission to survey their CPS workers. CPS workers are those persons who investigate child abuse and neglect reports, provide ongoing services to abused and/or neglected children, and supervise children in out of family placements. Of the 92 directors contacted, 46% (n=42) responded. Forty directors gave permission to survey CPS workers in their counties and two directors chose not to participate. Directors furnished 360 names and addresses of CPS workers, of whom 84% (n=303) were females and 16% (n=57) were males.

A letter of invitation to participate in the study along with a questionnaire consisting of a demographic data sheet, the Brief Symptom Inventory (Derogatis, 1975), the Impact of Event Scale-Revised (Weiss & Marmar, 1997), and the Structural Family Interaction Scale (Peroza, Hansen, & Peroza, 1981) were mailed to the 360 CPS workers. Fifty-seven percent (n=205) of the workers completed and returned the questionnaires in a timely fashion. The personal characteristics of the participants are described earlier in this section.

Results

Exposure to traumatic events.

Clearly, these child protective services workers were exposed to the trauma that abused children had experienced (see Table 2). They saw the evidence of the brutal victimization and listened as children recounted vivid and graphic descriptions of their abuse. They were working long hours providing services to substantial numbers of children in dangerous environments. The majority of participants (65%; n=118) reported working 41 to 50 hours per week, while 33% (n=61) reported working 31 to 40 hours per week. The average monthly caseload size during the past six months was reported to be 28 (sd=9.2).
Not surprisingly, the majority of these CPS workers reported having worked with children who had been traumatized. Seventy-two percent (n=131) of workers reported having worked with a child who had witnessed an actual death. All but one staff (n=182) reported having worked with a child who had been sexually abused.

In addition to being exposed to the trauma of the children under their care, many had also experienced direct trauma in the line of duty. Seventy eight percent (n=143) reported having been assaulted or threatened by a client while on the job. The average number of job related assaults or threats was 5.2 occurrences (sd=12).

On a personal level, not as many had directly experienced traumatic events in their lives before beginning this work. About one half of respondents (n=92) had witnessed a death and 44% (n=81) had experienced a serious injury and a threat to their physical well-being. On the average, these participants reported 3.1 traumatic experiences (sd=2.5) in their personal lives.
Severity and Prevalence of STS.

This phase of the analysis focused on two related questions: first, to what extent do the participants in this study exhibit general emotional distress and specific symptoms consistent with STS; and second, how severe are those symptoms? In order to answer the first question about the severity of distress, a comparison was made between the average scores of the participants on each of the sub-scales on the BSI and the normative scores for non-psychiatric patients and outpatient psychiatric patients on the same scales (See Table 3). Consistently, the average scores of the participants were significantly higher (p<.001) than those of the non-psychiatric patient sample on all of the BSI subscales, and significantly lower (p<.001) than those of outpatient psychiatric patients. In other words, the participants on average reported being in distress, but not at a level typical of outpatient psychiatric patients.

Table 3. T-Tests for Differences in Means for the Primary Symptoms Scales of the BSI for CPS Workers and Normative Sample

<table>
<thead>
<tr>
<th></th>
<th>CPS Workers (n=183)</th>
<th>Psychiatric Outpatients-a (n=1,002)</th>
<th>Non-psychiatric patient adults-b (n=974)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatization</td>
<td>.45 (.53)a,b</td>
<td>.83 (.79)</td>
<td>.29 (.40)</td>
</tr>
<tr>
<td>Obsessive-Compulsive</td>
<td>1.18 (.83)a,b</td>
<td>1.57 (1.00)</td>
<td>.43 (.48)</td>
</tr>
<tr>
<td>Interpersonal-Sensitivity</td>
<td>.71 (.78)a,b</td>
<td>1.58 (1.05)</td>
<td>.32 (.48)</td>
</tr>
<tr>
<td>Depression</td>
<td>.64 (.70)a,b</td>
<td>1.80 (1.08)</td>
<td>.28 (.46)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>.76 (.65)a,b</td>
<td>1.70 (1.00)</td>
<td>.35 (.45)</td>
</tr>
<tr>
<td>Hostility</td>
<td>.64 (.62)a,b</td>
<td>1.16 (.93)</td>
<td>.35 (.42)</td>
</tr>
<tr>
<td>Phobic Anxiety</td>
<td>.19 (.43)a,b</td>
<td>.86 (.88)</td>
<td>.17 (.36)</td>
</tr>
<tr>
<td>Paranoid-Ideation</td>
<td>.82 (.74)a,b</td>
<td>1.14 (.95)</td>
<td>.34 (.45)</td>
</tr>
<tr>
<td>Psychoticism</td>
<td>.51 (.59)a,b</td>
<td>1.19 (.87)</td>
<td>.15 (.30)</td>
</tr>
<tr>
<td>GSI</td>
<td>.66 (.52)a,b</td>
<td>1.32 (.72)</td>
<td>.30 (.31)</td>
</tr>
</tbody>
</table>

a = p<.001; Outpatient Psychiatric sample taken from Deragotis, L. (1993).
Brief Symptom Inventory: Administration, Scoring, and Procedures Manual.
Minneapolis: National Computer Systems.

In order to assess the prevalence of distress at a level consistent with those in treatment for mental health problems, the standard (z-score) mid-point score for each of the BSI sub-scales for outpatient psychiatric patients was identified. The scores of each participant for each subscale was then compared with that cutoff score (See Table 3). Between 6% and 37% of the participants reported symptoms on at least one subscale at a level as high or higher than those of outpatient psychiatric patients. For men, (n=32), 37% reported symptoms of paranoid ideation and 19% expressed symptoms of obsessive/compulsive distress, interpersonal sensitivity, hostility, and psychoticism. Approximately 36% (n=54) of the females (n=150)
reported symptoms of obsessive compulsive distress and at least 26% (n=47) reported symptoms of paranoid ideation and somatization.

**Table 4.** BSI Standard (t-score) mean score norms for outpatient psychiatric patients and percent of participants with scores above that midpoint by gender

<table>
<thead>
<tr>
<th></th>
<th>Females (n=150)</th>
<th>Males (n=32)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatization</td>
<td>.66 26%</td>
<td>.42 9%</td>
</tr>
<tr>
<td>Obsession-Compulsion</td>
<td>1.47 36%</td>
<td>1.35 19%</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>1.47 11%</td>
<td>1.23 19%</td>
</tr>
<tr>
<td>Depression</td>
<td>1.83 65%</td>
<td>1.47 12%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>1.67 6%</td>
<td>1.47 6%</td>
</tr>
<tr>
<td>Hostility</td>
<td>.99 21%</td>
<td>.74 19%</td>
</tr>
<tr>
<td>Phobic Anxiety</td>
<td>.58 8%</td>
<td>.54 16%</td>
</tr>
<tr>
<td>Paranoid-Ideation</td>
<td>.95 27%</td>
<td>.74 37%</td>
</tr>
<tr>
<td>Psychoticism</td>
<td>.95 17%</td>
<td>.95 19%</td>
</tr>
<tr>
<td>GSI</td>
<td>1.31 13%</td>
<td>1.11 9%</td>
</tr>
</tbody>
</table>


Since there are no reported norms for the Impact of Events Scale-Revised, it is not possible to test the classification of participants as having the diagnosis of STS based on that measure. As is evident from the responses to the BSI, a significant number of the CPS staff are in a level of distress that is comparable to people who would seek treatment for those symptoms.

The next area of examination addresses the research question about the relationship between work related and personal factors and the presence STS symptoms. In order to test this hypothesis, separate analyses were done using multiple regression to identify the association between level of distress as reported in the BSI and the IES-R and the cluster of personal and work related factors that were expected to contribute to symptoms of STS.

**Work Related and Personal Factors.**

In order to test the relationship between personal and work related trauma and symptoms of STS, a series of step-wise multiple regression tests were conducted. It is reasonable to expect that some independent variables will overlap in their influence on the dependent variable. One advantage of such a test is that the variables that contribute most to the variance explained are entered first into the solution, with other variables not being entered unless they meet preset criteria. Five analyses were conducted with each examining a different dependent variable, including the Global Severity Index from the BSI, the total Impact of Events score, and its sub-scales; Avoidance, Intrusiveness, and Hyperarousal. For each test, the independent variables included gender, history of personal trauma before employment as a CPS worker, history of personal trauma on the job, total number of types of trauma experienced by the children in the workers' caseload, the average size of the caseload during the previous six months, length of employment, and number of hours per week worked as a CPS worker.
Table 5. Step-Wise Multiple Regression Analyses for Work and Personal related STS of CPS Workers

<table>
<thead>
<tr>
<th>Variables*</th>
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<th>SE B</th>
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*Potential variables for inclusion were: number of secondary trauma on job, personal trauma on job, number of personal trauma before the job, average work hours, age, gender, average caseload during previous 6 months, length of employment

The distress tapped by the Global Severity Index was associated with the number of assaults experienced on the job (r²=.20). Working more than 40 hours per week contributed additionally to the variance explained (r²=.12). No other variables contributed to the variance explained by that model. For the IES overall score, gender is linked to symptoms on the IES-R (r²=.16), with females more likely to report symptoms than men. In addition, having experienced a trauma on the job (not the number of events) contributed to this model (r²=.12). The only variable that was associated with symptoms of Avoidance was the average number of hours worked each week (r²=.14). Variation in Intrusive thoughts scores was partially explained by a history of being traumatized on the job (r²=.18). Finally, Hyperarousal was most associated with gender, as was the overall score on the IES-R. For none of the dependent measures was the total number of secondary trauma predictive of higher scores on those measures.

Discussion

This survey based study of child protective service workers has revealed strong relationships between some personal and work related factors and secondary trauma of child protective services workers who participated in this study.

As a group, these participants deal with a great amount of traumatic material in their efforts to protect children from abuse. In addition, they experienced personal trauma both before and since beginning their work in the CPS field. The majority of CPS workers (82%) reported that they had experienced a trauma prior to working in the child protective service field and 77% reported having been assaulted or threatened while on the job.

On the average, these workers experienced a level of distress that is less than those of
typical outpatient mental health clients, but above those of the general population. However, more revealing is the fact that a significant portion of the participants experienced levels of distress that were above the levels reported by typical outpatient mental health clients. This suggests the need for professional intervention. Male staff were more likely than female staff to report this level of distress in the areas of interpersonal relations, depression, phobic anxiety, paranoid ideation and psychoticism symptoms. On the other hand, female staff were more likely to report unusually high levels of somatization, obsessive/compulsive distress, hostility, and global distress symptoms. While the Brief Symptom Inventory and the Impact of Events Scale have been widely used in the STS field to assess the severity of distress, it is possible that the respondents are experiencing symptoms tapped by these measures for some reason other than STS. For example, it is conceivable that they have developed symptoms of depression due to long work hours and poor administrative support or earlier personal trauma. This study was not designed to tease out alternative explanations for the symptoms.

It is important to note that different variables were found to influence the variance in the individual measures of STS. For example, the Global Distress Index (GSI) was most influenced by a combination of the number of personal assaults experienced on the job and the fact that the worker put in more than 40 hours per week in his/her role. However, the level of distress reported in the Impact of Events Scale was related to being female and having been traumatized on the job, but not by the number of times that they had been assaulted.

In order to promote our understanding and potential to help CPS workers, we must add to this preliminary information. First, we need further information about the process of how some workers develop these symptoms, while others appear not to be in distress. It is not clear from this single cross-sectional study whether others have the symptoms and are less open to acknowledging them or if they somehow have found successful ways to shield themselves from the potential harm of working in this context. We need to understand this process so that we can design more effective interventions to assist these professionals. As stated above, it may be that the distress reported by the respondents was caused by some other factor not assessed by this study instead of facing the trauma of children. Similarly, the differences in distress reported by men and women CPS workers may be a reflection of differences in willingness to share emotional distress on the part of women. Again, this study is not able to sort out the cause of the difference, and instead is limited to reporting the difference found.

Second, there is some evidence in this study to suggest that the level of exposure on a short term basis may contribute more to the development of this distress than the number of years working in a particular field. Staff in this type of high exposure work should be protected from excessive work hours. This finding clearly needs to be explored in more depth to better understand the relationship between short term and long term exposure to the traumatic events that children face. Ultimately, this research can benefit both the workers in this important field and the abused children they protect.

Third, additional support services are needed to assist staff who have been traumatized in the line of duty to deal with that experience. From a staff development and training perspective, it seems important to recognize the role that good administrative support can play in reducing the risks that CPS staff face in their daily work. Obviously, safety of staff to reduce possible assaults makes sense just from a personal welfare standpoint. However, this study suggests that beyond the harm experienced by an assault, CPS workers face a greater likelihood of becoming more seriously traumatized in their continued work with children if
they have been personally traumatized.

In conclusion, this preliminary study suggests that professionals who work with abused and neglected children are at risk of developing symptoms consistent with secondary trauma. Workers who participated in this project have provided invaluable information about the depth of their distress.

References


