Correlates of Secondary Traumatic Stress in Child Protective Services Workers

Brian E. Bride, PhD
Jenny L. Jones, PhD
Samuel A. MacMaster, PhD

SUMMARY. The purpose of this study was to add to the limited research on secondary traumatic stress in child welfare by investigating correlates of secondary traumatic stress (STS) in child protective services workers. Specifically, we examined the relationship between levels of STS in CPS professionals and personal history of trauma, peer and administrative support, intent to remain employed in child welfare, professional experience, and size of caseload. This study documents the existence of secondary traumatic stress in the population and the relationship between levels of secondary traumatic stress in CPS professionals and the group of potential correlates: personal history of trauma in the past year and lifetime, peer support, administrative support, intent to remain employed in child welfare, professional experience, and size of caseload.
doi:10.1300/J394v04n03_05

Brian E. Bride is affiliated with the University of Georgia.

Jenny L. Jones and Samuel A. MacMaster are affiliated with the University of Tennessee.

[Haworth co-indexing entry note]: "Correlates of Secondary Traumatic Stress in Child Protective Services Workers." Bride, Brian E., Jenny L. Jones, and Samuel A. MacMaster. Co-published simultaneously in the *Journal of Evidence-Based Social Work* (The Haworth Press, Inc.) Vol. 4, No. 3/4, 2007, pp. 69-80; and: *Developing an Empirically Based Practice Inititative: A Case Study in CPS Supervision* (ed: Jenny L. Jones, and Paul Sundet) The Haworth Press, 2007, pp. 69-80. Single or multiple copies of this article are available for a fee from The Haworth Document Delivery Service [1-800-HAWORTH, 9:00 a.m. - 5:00 p.m. (EST). E-mail address: docdelivery@haworthpress.com].

Available online at http://jebsw.haworthpress.com

doi:10.1300/J394v04n03_05

KEYWORDS. Child protective services, secondary traumatic stress, burnout, employee retention

CORRELATES OF SECONDARY TRAUMATIC STRESS IN CHILD WELFARE

The psychological effects of direct exposure to traumatic events such as childhood abuse, criminal victimization, natural disaster, and war and terrorism are well documented. Dozens of books and hundreds of scientific articles have been published documenting the nature and dynamics of traumatic stress (Wilson & Raphael, 1993). The majority of those reports, however, focus solely on those who were directly traumatized (Figley, 1999). It has become increasingly apparent that the effects of traumatic events extend beyond those directly affected. The term secondary traumatic stress has been used to refer to the observation that those who come into continued close contact with trauma survivors, including human service professionals, may experience considerable emotional disruption and may become indirect victims of the trauma themselves (Figley, 1995). Consequently, secondary traumatic stress is becoming viewed as an occupational hazard of providing direct services to traumatized populations (Figley, 1999; Munroe et al., 1995; Pearlman, 1999).

The negative effects of secondary exposure to a traumatic event are nearly identical to those of primary exposure (Figley, 1999). Chrestman (1999) notes that secondary traumatization may include symptoms observed in persons directly exposed to trauma such as: intrusive imagery related to the client's traumatic disclosures, avoidant responses, physiological arousal, distressing emotions, and functional impairment. In addition to these PTSD-like symptoms, the consequences of providing services to traumatized populations may also include "significant disruptions in one's sense of meaning, connection, identity, and world view, as well as in one's affect tolerance, psychological needs, beliefs about self and other, interpersonal relationships, and sensory memory" (Pearlman & Saakvitne, 1995, p. 151). First explicated by McCann and Pearlman (1990), this transformation in cognitive schemas and belief systems resulting from empathic engagement with clients' traumatic experiences has been termed vicarious traumatization. Secondary traumatic stress and vicarious traumatization both refer to the same phenomenon, however, the STS concept focuses primarily on symptomology, while

the concept of vicarious traumatization focuses on meaning and adaptation (Pearlman & Saakvitne, 1995b).

Despite a rapidly expanding literature on secondary and vicarious traumatization, there remains a relative dearth of research into this area. Bride (2004) conducted a review of 15 studies of secondary traumatic stress in individuals who provide psychosocial services to traumatized populations, and concluded that the empirical evidence provides support for the notion that individuals who provide psychosocial services are at risk of experiencing symptoms of traumatic stress, disrupted cognitive schema, and general psychological distress as a result of their work with traumatized populations. However, the severity of these experiences varied across studies from mild symptom levels (Brady, Guy, Poelstra, & Brokaw, 1999; Chrestman, 1999; Follette, Polusny, & Milbeck, 1994; Ortlepp & Friedman, 2002; Steed & Bicknell, 2001) to levels similar to those of persons in outpatient treatment for PTSD (Arvay & Uhleman, 1996), and only a subset of study participants reported symptoms. There is some evidence that younger service professionals may be at increased risk (Arvay & Uhleman, 1996; Ghahramanlou & Brodbeck, 2000), however, this may have less to do with age and more to do with the development of coping mechanisms that comes with increased experience. That is, younger professionals are likely to be newer to the field and less like to have had the opportunity to develop protective strategies to deal with the difficulties of working with traumatized populations. In regards to the influence of exposure to traumatized populations on levels of secondary traumatic stress, the length of experience providing general psychosocial services seems to have less influence on symptomatology than the length of experience specifically providing trauma services. In addition, it appears that level of exposure to traumatized clients is more important than length of exposure in that higher proportions of traumatized clients on caseloads (Chrestman, 1999; Kassam-Adams, 1999; Schauben & Frazier, 1995), and higher proportion of time spent in trauma-related clinical activities are more predictive of secondary trauma symptoms (Brady et al., 1999). Although there has been speculation that providing services to traumatized children places providers at higher risk for secondary traumatic stress as compared to work with adults, the empirical evidence does not bear this out (Brady et al., 1999; Meldrum, King, & Spooner, 2002). However, results of several studies indicate that a personal trauma history, particularly in childhood, is a significant risk factor (Ghahramanlou & Brodbeck, 2000; Kassam-Adams, 1999; Nelson-Gardell & Harris, 2003; Pearlman & Mac Ian, 1995). Further, the use of social supports and positive coping

strategies appear to be associated with lower levels of symptomatology (Follette et al., 1994; Schauben & Frazier, 1995). It should be noted, however, that the findings summarized above should be viewed with caution, as findings were generally mixed in each of the specific areas reviewed.

Secondary Traumatic Stress and Child Welfare

With two exceptions noted below, the articles included in the review cited above reported primarily on psychotherapists and sexual assault counselors. Several authors have noted that CPS professionals are particularly at risk for the development of STS symptoms given their daily contact with physically, sexually, and emotionally abused children (Bell, Kulkarni, & Dalton, 2003; Horwitz, 1998). Despite the fact that CPS workers are logically at risk for STS, only two studies have been published that examine STS in this population. The first study found that CPS workers experienced greater psychological distress that the general population, and many reported distress levels greater than those reported by typical outpatient mental health clients (Cornille & Myers, 1999; Meyers & Cornille, 2002). In addition, longer tenure in the CPS field was associated with higher levels of STS and working more than 40 hours per week was associated with higher levels of STS. The second study of STS in child welfare was reported by Nelson-Gardell and Harris (2003) who conducted a study of 166 child welfare staff, including child protection workers, supervisors and managers who took part in an evaluation of a STS training program in two states. Participants completed a demographic questionnaire, the Childhood Trauma Questionnaire (Bernstein & Fink, 1998), and the Compassion Fatigue Self Test for Psychotherapists (Figley, 1995). Consistent with several studies in other populations, their findings suggest that a personal history of childhood trauma increases a child welfare worker's risk of STS. More specifically, a combination of more than one type of childhood trauma presents the greatest risk for vulnerability to STS, with emotional abuse and neglect being the strongest predictors of STS.

The purpose of this study is to add to the limited research on STS in child welfare by investigating correlates of secondary traumatic stress in child protective services workers. Specifically, we examined the relationship between levels of secondary traumatic stress in CPS professionals and personal history of trauma in the past year and lifetime, peer

support, administrative support, intent to remain employed in child welfare, professional experience, and size of caseload.

METHODOLOGY

Data Collection

Data was collected by means of a web-based survey. The e-mail addresses of all CPS case managers and supervisors in the state of Tennessee were obtained from the Tennessee Department of Children's Services. An e-mail with a brief description of the study, the use of the data, the risks and benefits involved in participating in the study, and the confidentiality of the data was sent to all CPS workers. The e-mail provided participants with a link to the URL containing the survey instruments, as well as login and password information required to access the survey. No identifying information was solicited, although participants were asked to provide a unique identifier consisting of the first two letters of their mother's maiden name, the last two digits of their year of birth, and the last two digits of their social security number. Two additional e-mails were sent at one week intervals requesting participation in the study. The Website containing the survey instruments was shut down three weeks following the initial e-mail.

Instrumentation

Demographic Information Questionnaire (DIQ). The DIQ is a 27-item survey constructed specifically for this study. Items were designed to gather standard demographic information (age, gender, ethnicity, salary, education, etc.) as well as information regarding specifics of their job (i.e., position, length of time in position, size of caseload, etc.) (Table 1).

Intent to Remain Employed–Child Welfare (IRE-CW). The IRE-CW (Ellet & Millar, 2001) contains 9 items and uses a four-point Likert response format ranging from *strongly disagree* to *strongly agree* to assess respondents' intention to leave child welfare employment. The IRE-CW is based on a conceptual definition of employee intent to remain employed that is derived from an understanding of personal, psychological, and work context factors and encompasses cognitive, affective, and behavioral elements. The IRE-CW has been found to have factor validity and internal consistency (coefficient alpha = .86) (Ellett & Millar, 2001).

Secondary Traumatic Stress Scale (STSS). Designed to measure work-related secondary traumatic stress in human service professionals, the STSS (Bride, Robinson, Yegidis, & Figley, 2004) is comprised of three subscales (Intrusion, Avoidance, and Arousal) that are congruent with the PTSD symptom clusters as delineated in the DSM-IV-TR (APA, 2000). Respondents indicate how frequently they experienced each of 17 symptoms during the previous week using a five-choice, Likert-type response format ranging from *never* to *very often*. The STSS has demonstrated evidence of convergent, discriminant, and factor validity, as well as Cronbach alpha levels for each subscale and the entire scale as follows: Total Scale = .93, Intrusion = .80, Avoidance = .87, and Arousal, = .83 (Bride et al., 2004).

Professional Organizational Culture Questionnaire–Social Work (POCQ-SW). The POCQ-SW (Ellett & Millar, 2001) is a 26-item instrument designed to assess three dimensions of organizational culture by means of the following subscales: Administrative Support, Professional Sharing and Support, and Professional Commitment. Investigation of internal consistency resulted in coefficient alphas of .92 for Administrative Support, .83 for Professional Sharing and Support, and .83 for Vision/ Professionalism/Commitment. Further, evidence supported the factor validity of the instrument (Ellett & Millar, 2001).

RESULTS

A total of 333 CPS professionals in the state of Tennessee were contacted via E-mail to participate in this study, of which 187 completed surveys were received representing a 56% response rate. Respondents were primarily female (83%) with a mean age of approximately 37. Three-quarters of respondents identified their ethnicity as Caucasian (76.1%), with the remainder identifying as African-American (20.7%) or Other (3.2%). Most (87.2%) indicated their highest educational level was a bachelors degree with only 11.7% reporting having a masters degree and 2 (1.1%) reporting a high school degree as their highest educational level. 81.9% of respondents were in case management positions and 18.1% identified as supervisors.

Respondent's mean scores on the STSS, POC, and IRE-CW are presented in Table 2. Scores on the STSS and its subscales represent moderate levels of secondary trauma in the sample. Of course this represents an aggregate mean. More telling is the fact that 92% of respondents reported experiencing at least one STS symptom at least "occasionally" in

TABLE 1. Demographic and Professional Characteristics of Respondents

	n	X	S.D.	%
Age	187	36.95	11.04	
Experience (yrs)	277	16.15	9.59	
Gender				
Female	156			83.0
Male	32			17.0
Ethnicity				
Caucasian	143			76.1
African American	39			20.7
Other	6			3.2
Highest Educational Level				
High School	2			1.1
Bachelors	164			87.2
Masters	22			11.7
Position				
Case Manager	154			81.9
Supervisor	34			18.1

Note: Percentages may total more than 100% due to rounding error.

TABLE 2. Summary Scores on the STSS, POC, and IRE-CW

	n	$\bar{x}$	SD
Secondary Traumatic Stress Scale			
Intrusion Subscale	187	10.97	4.07
Avoidance Subscale	187	15.64	5.98
Arousal Subscale	187	11.58	4.22
Total Score	187	38.20	13.38
Professional Organizational Culture Questionnaire			
Administrative Support Subscale	179	31.55	6.84
Professional Sharing and Support	186	21.69	4.08
Vision and Professional Commitment	184	24.48	3.67
Intent to Remain Employed–Child Welfare Scale	186	23.30	5.68

the week preceding the survey and 59% reported experiencing one or more STS symptoms "often" during the same period. Further, 34% of respondents met the core criteria for work related PTSD (APA, 2000) as indicated by experiencing at least one intrusion, three avoidance, and two arousal symptoms "often" in the prior week.

Table 3 displays the bivariate correlations (Pearson's *r*) between secondary traumatic stress levels as measured by the total STSS scores and correlates of interest. Of the seven correlations tested, four were found to be statistically significant at an alpha level of less than .05. The magnitudes of two of these correlations were relatively small; STS symptoms were negatively correlated with peer support ($r = -.145$) and positively correlated with caseload size ($r = .171$). That is, higher levels of peer support were associated with lower levels of STS symptoms and higher caseloads were associated with increased STS symptoms. A somewhat stronger correlation was found between STS symptoms and a personal history of trauma ($r = .247$), although no relationship was found with a recent trauma history. The strongest correlation ($r = -.388$) was found between STS symptoms and intent to remain employed, suggesting that higher levels of STS symptoms are associated with a desire to leave the field.

DISCUSSION

This study adds to the limited research on secondary traumatic in child welfare by providing data on the existence, and correlates of, secondary traumatic stress in child protective services workers. Specifically, we were able to begin to document the existence of secondary

Table 3. Bivariate Correlations with the STSS Total Score

	n	*r*
Past year trauma history	174	NS
Lifetime trauma history	177	.247**
Peer support	185	–.145*
Administrative support	178	NS
Intent to remain employed	185	–.388**
Professional experience (yrs)	187	NS
Caseload size	187	.171*

Note: NS = not significant, * = $p < .05$, ** = $p < .01$.

traumatic stress in the population, as moderate levels of secondary trauma were found in the sample as a whole, and more than a third of the sample met the core criteria for work related PTSD. Of course, this data is only suggestive of similarly high prevalence rates, but they are consistent with the notion that child welfare workers are at particularly high risk for developing secondary traumatic stress symptoms given the incidence of the traumatic situations the children that they work with experience coupled with the possibilities of a less than supportive work environment. The present study does not allow formal testing of this notion, though further study is clearly warranted.

Perhaps the most interesting findings presented in this paper are the documentation of the relationship between levels of secondary traumatic stress in CPS professionals and the group of potential correlates: personal history of trauma in the past year and lifetime, peer support, administrative support, intent to remain employed in child welfare, professional experience, and size of caseload. The study was able to find statistically significant correlations between secondary traumatic stress levels as measured by the total STSS scores and four of the correlates of interest: peer support, caseload size, personal history of trauma, and intent to remain employed, and a lack of relationship with a personal history of recent trauma, administrative support, and professional experience.

These results are consistent with the literature, yet are of particular importance within the realm of child welfare as the employer can potentially impact three of the four correlations through interventions. Clearly support for these interventions is outside the scope of the study, however, the results suggest the possibility that by decreasing caseload size and cultivating opportunities for peer support individual workers may experience an amelioration of secondary trauma. Interestingly, peer support rather than administrative support was found to be significant, which is further suggestive of the type of support that needs to be cultivated. While intent to remain employed is as much a possible outcome of STS, it too may be reduced through awareness and interventions directed at decreasing its impact. Given the concerns about worker turnover in child welfare, this appears to be an area that can be directly addressed by child welfare agencies. The fourth correlate is interesting in that a history of personal trauma was significantly correlated with STS rather than recent personal trauma suggesting that there may be a predisposing factor to this phenomenon.

There are some obvious limitations to the data presented here. First, as the data is drawn from convenience sampling procedures, the responses in this study may not be representative of all child welfare workers.

Heightening this concern is that fact that the participation rate for the survey was only 56%. Many CPS workers chose not to be involved in the project. This may have occurred for a variety of reasons: difficulties in maintaining contact with workers, concerns on the part of the worker regarding their confidentiality, and/or lack of investment in the topic due to not having had experienced secondary trauma. Second, the sample size (n = 187), while adequate for the purposes of this study, clearly limits our ability to draw reliable conclusions to the entire population of child welfare workers. However, given the descriptive focus of the analyses presented, the sample size is appropriate to the study purpose. Actual prevalence rates and relationships to other variables are outside of the scope of this study. Future research efforts may want to test such questions in a more scientific manner.

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doi:10.1300/J394v04n03_05