

An Assessment of Secondary Traumatic Stress in Juvenile Justice Education Workers

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Abstract

Given the frequency and violent character of the traumas encountered by juvenile offenders, staff members who regularly interact with juveniles in custody are at risk of developing secondary traumatic stress. Juvenile justice teachers and staff ($N = 118$) were administered a cross-sectional survey, including the Secondary Traumatic Stress Scale. Respondents said the students were moderately traumatized (47%), severely traumatized (27%), and very severely traumatized (7%). Regarding STS, the most frequently reported symptom was intrusive thoughts related to work with the students, mentioned by 61% of respondents. Additionally, 81% met at least one, 55% met two, and 39% met all three core diagnostic criteria for posttraumatic stress disorder. Recommendations for juvenile justice staff members and for the organization are provided to address practice and policy implications.

Keywords

secondary traumatic stress, juvenile justice staff, posttraumatic stress disorder

Children and adolescents in the United States are affected by traumatizing events in their families and communities at alarming rates. Approximately 25% of American minors experience a “high magnitude event” by the age of 16 (Costello, Erkanli, Fairbank, & Angold, 2002). The trauma experiences can include familial loss, death of friends, community violence, community crime, sexual assault, child maltreatment, and other traumatizing events (Buka, Stichick, Birdthistle, & Earls, 2001; Osofsky, 1995). The exposure to traumatizing events is associated with severe emotional and behavior outcomes (Rheingold et al., 2003).

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Exposure to events such as domestic violence, abuse, and witnessing violence can be considered a risk factor and profile marker for juvenile offenders (Horowitz, Weine, & Jekel, 1995). Assessment of juvenile delinquents shows that their trauma exposure is significantly more prevalent. Approximately 90% of delinquent youth have experienced a traumatically stressful life event, a rate greater than that among nonoffending youth (Abram et al., 2004; Costello et al., 2002). Juvenile offenders are also at high risk for multiple traumas and development of posttraumatic stress symptoms that reflect their exposure to multiple types of violence (Buka et al., 2001; Burton, Foy, Bwanausi, Johnson, & Moore, 1994). More than 82% of offending youth report exposure to multiple events, compared to 4.5% of the nonoffending youth who experience multiple traumas (Costello et al., 2002; Ruchkin, Schwab-Stone, Kopolov, Vermeiren, & Steiner, 2002). Furthermore, the trauma that youth offenders experience is more violent than that experienced by nonoffenders. The most common trauma reported by juvenile offenders is witnessing violence, whereas community youth more often report the death of a loved one as the trauma to which they have been exposed (Abram et al., 2004; Costello et al., 2002; Ruchkin et al., 2002).

Juvenile justice staff members are expected to routinely interact with juvenile offenders as a core function of their employment. The interaction among staff members and traumatized youth subsequently places the staff at risk for developing secondary traumatic stress (STS). STS is a phenomenon where staff who provide services to traumatized populations are indirectly traumatized as a result of the professional helping relationship. This phenomenon has been documented in clinicians working in fields such as mental health and substance abuse (Brady, Guy, Poelstra, & Brokaw, 1999; Bride, Hatcher, & Humble, 2009; Follette, Polusny, & Milbeck, 1994; Meldrum, King, & Spooner, 2002; Pearlman & Mac Ian, 1995), child welfare (Bride, Jones, & MacMaster, 2007), domestic violence and sexual assault counseling (Bell, Kulkarni, & Dalton, 2003; Ghahramanlou & Brodbeck, 2000; Kassam-Adams, 1999; Schauben & Frazier, 1995; Slattery & Goodman, 2009), and social work (Bride, 2007; Cunningham, 2003). Unfortunately, the effect of STS on nonclinical staff members working in direct roles with traumatized populations such as youth detainees remains largely unstudied. There has been limited research evaluating the impact of STS among service professionals in adult and juvenile correctional settings. The research presented in this article seeks to lessen the knowledge gap by exploring the presence of STS among service professionals in the juvenile justice system.

STS

STS refers to the observation that people, such as family, friends, and human services professionals, may become indirect victims of a trauma due to their close contact with trauma survivors (Figley, 1995). Symptomatology of secondary traumatization reflects that of posttraumatic stress disorder (PTSD) and includes intrusive imagery related to clients' traumatic disclosures (Courtois, 1988; Danieli, 1988; Herman, 1992; McCann & Pearlman, 1990), avoidant responses (Courtois, 1998; Haley, 1974), and physiological arousal (Figley, 1995; McCann & Pearlman, 1990). According to the American Psychiatric Association (APA, 2000); intrusion/reexperiencing symptoms (Criterion B) include recurrent and intrusive images, thoughts, or perceptions connected to the event, or recurrent distressing dreams during which the event is replayed; acting or feeling as if the traumatic event were recurring in the form of illusions, hallucinations, flashbacks, or a sense of reliving the experience; and intense psychological distress or reactivity when exposed to internal or external cues or reminders of the event. Avoidance symptoms (Criterion C) involve persistent evading of stimuli associated with the trauma, including numbing of responsiveness. This avoidance may take the form of efforts to elude thoughts, feelings, conversations, activities, places, or people that are associated with or reminders of the traumatic event. Avoidance symptoms also include loss of interest or participation in significant activities, detachment or estrangement from others, restricted range of affect, and a sense of foreshortened future. A person experiencing avoidance symptoms also may be unable to remember important

aspects of the traumatic event. Arousal symptoms (Criterion D) include persistent symptoms of anxiety or increased arousal that do not predate the trauma, such as difficulty falling or staying asleep, irritability or outbursts of anger, difficulty concentrating, hypervigilance, or exaggerated startle response.

STS is increasingly viewed as an occupational hazard of providing direct services to trauma survivors (Bride, 2004; Figley, 1999). As awareness of STS has grown, investigators have begun to examine the predictors and correlates of STS in psychotherapists and mental health professionals (Brady et al., 1999; Follette et al., 1994), sexual assault counselors (Ghahramanlou & Brodbeck, 2000; Schauben & Frazier, 1995), and trauma therapists (Arvay & Uhlemann, 1996; Pearlman & Mac Ian, 1995). It is expected that professionals at risk for STS are those who work directly with client trauma or at an agency where trauma is a foundation of the mission (e.g., sexual assault or crisis intervention). In that respect, STS is not limited in its scope. School personnel who report child maltreatment have also been found to exhibit symptoms of STS (VanBergeijk & Sarmiento, 2006).

Juvenile Justice Teachers' Risk for STS

Exposure to a traumatized population is a necessary precondition to STS. The experience of teaching in a juvenile justice environment exposes teachers to traumatized populations on a regular basis. Evidence is emerging that youth in the juvenile justice system differ from the "garden variety" student (Kering, Ward, Vanderzee, & Moeddel, 2009). According to the U.S. Department of Justice (2006), 2.1 million juveniles were arrested by the police in 2005. Research has shown that these youth often have a history of trauma as a result of stressful life experiences (Abram et al., 2004; Kering et al., 2009; Newman, 2002; Steiner, Garcia, & Matthews, 1997).

According to Steiner et al. (1997), approximately 27% of detained youth have experienced violence in their family that includes abuse, murder, and grave injury and 21% have experienced community violence. As a result of the extreme trauma exposure, rates of PTSD are much higher at 24.8% in the detainee population compared to the 3.5% in the general population (Costello et al., 2002; Ruchkin et al., 2002), which reflects an increase eight times higher than the community sample (Wolpaw & Ford, 2004). Along with PTSD (Gianconia et al., 1995), the effects of trauma include depression (Fitzpatrick, 1993), aggression (Martin, Gordon, & Kupersmith, 1995; Miller, Wasserman, Neugebauer, Gorman-Smith, & Kamboukos, 1999), and substance abuse (Gilvarry, 2000; Kilpatrick et al., 2000). Youth who are placed in the child welfare system due to abuse and neglect also have a 47% higher delinquency rate than children who have been abused or neglected (Ryan & Testa, 2005). As a result of the high rates of trauma exposure that detained youth experience, juvenile justice teachers are subsequently at risk for STS.

Purpose of the Study and Research Question

The purpose of the present study was to determine to what extent juvenile justice education staff experience STS. As such, we were guided by two research questions: (a) To what extent do teachers and staff perceive that the youth in detention have experienced traumatic events and traumatic stress symptoms? and (b) To what extent do juvenile justice teachers and staff experience STS? To answer these questions we conducted a cross-sectional survey.

Methodology

Sample and Procedures

The study is a secondary analysis of data collected from Georgia Department of Juvenile Justice (DJJ) staff who attended a self-care session at the agency's annual conference. Participants were

asked to anonymously complete surveys describing their responses to regular occurrences in class. These surveys were standard questionnaires that were used to assess participants' activities during the year. A total of 118 participants completed the questionnaires during the first 10 minutes of the self-care sessions. The study was approved by the Human Subjects Committee at the University of Georgia.

Survey Instrument

Demographic questions assessed personal and professional characteristics as well as respondents' beliefs and experiences related to their work with detained youths. Personal information included age, gender, and race/ethnicity. Professional demographics included profession, job title, degrees/licenses held, and years of experience both in the field and specifically at DJJ. The instrument also included items on job-related activities. Job-related questions prompted respondents to list frequent job activities such as "teach reading to students" but also required them to estimate the average number of hours he/she spends in direct contact with juvenile detainees. Finally, respondents were asked to rate the extent to which the client/student population is traumatized, the degree to which their work addresses issues related to student traumatic stress, and the level of fear, hopelessness, or horror respondents have felt due to their work with traumatized students.

To assess counselors' levels of STS, they were administered the Secondary Traumatic Stress Scale (STSS; Bride, Robinson, Yegidis, & Figley, 2004), a 17-item self-report instrument comprised of three subscales (Intrusion, Avoidance, and Arousal) that are congruent with the PTSD symptom clusters as noted in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed., Text Rev. (*DSM-IV-TR*; APA, 2000). Respondents indicated how frequently they experienced each of 17 symptoms during the previous week using a five-choice, Likert-type response format ranging from *never* (1) to *very often* (5). Thus, the scale scores may range from 17 (least likelihood of STS) to 85 (most likelihood of STS). The STSS has demonstrated evidence of convergent, discriminant, and factor validity, as well as internal validity (Bride et al., 2004).

Results

Sample Characteristics

Table 1 shows the demographic and professional characteristics of the DJJ workers. Analysis of demographic information reveals that study participants were primarily female, White, and entirely college educated. All of the participants were in the educational profession including special education. More than 80% of their working hours were spent with juveniles.

Students' Trauma Experience and Work Focus

DJJ staff and teachers were asked to estimate the extent to which their students had experienced various traumatic events. Table 2 summarizes their experience with traumatized students. Approximately 95% of the respondents reported that the population they work with is traumatized and 34% said the students were severely traumatized or worse. Participants were also asked the extent to which their work addressed issues related to student traumatic stress. Again, 95% of the juvenile justice workers responded that their work addresses such issues. Also, 92% of the workers responded that they themselves have experienced some degree of fear, helplessness, or horror in response to the trauma reported by students.

Table 1. Demographic and Professional Characteristics of Juvenile Justice Workers

	<i>N</i>	<i>M</i>	<i>SD</i>	%
Age	87	47	12.15	
Years of experience in education	105	17	11.57	
Years of experience in DJJ	96	5	5.20	
Hours worked per week	113	42	4.84	
Hours worked with juveniles per week	109	34	9.97	
Gender				
Female	67			75.3
Male	22			24.7
Ethnicity				
White	52			59.8
Black	32			36.8
Other	3			3.4
Education				
College degree	37			37.8
Master's degree	60			61.2
Doctoral degree	1			1.0

Note: DJJ = Department of Juvenile Justice; *SD* = standard deviation. Some items were not responded to by participants.

Table 2. Juvenile Justice Workers' Experience With Traumatized Students

	Not at All <i>n</i> (%)	Mildly/ Rarely <i>n</i> (%)	Moderately/ Occasionally <i>n</i> (%)	Severely/ Often <i>n</i> (%)	Very Severely/ Very Often <i>n</i> (%)	Mean (<i>SD</i>)
My student population is traumatized	6 (5.4)	15 (13.4)	53 (47.3)	30 (26.8)	8 (7.1)	3.17 (.94)
My work addresses issues related to student traumatic stress	6 (5.4)	23 (20.5)	44 (39.3)	30 (26.8)	9 (8.0)	3.12 (1.00)
I have experienced fear, helplessness, or horror in response to the trauma reported by students	9 (8.1)	48 (43.2)	35 (31.5)	17 (15.3)	2 (1.8)	2.59 (.91)

Note: *SD* = standard deviation.

STS

Table 3 displays the frequency with which respondents endorsed specific STS symptoms. A symptom was considered to be endorsed if the respondent indicated that the symptom was experienced "occasionally," "often," or "very often" in the previous 7 days. The group of five Intrusion symptoms contained both the most and the least frequently reported symptoms. The most frequently reported symptom was intrusive thoughts, with 61% of respondents indicating that they thought about their work with traumatized students without intending to. Experiencing psychological distress or a physiological reaction in response to reminders of work with traumatized students were the next most frequently reported intrusion symptoms, reported by 36.4% and 32.1% of respondents, respectively. Reported much less frequently were a sense of reliving the traumas reported by students (29.7%) and distressing dreams (13.5%).

Table 3. Frequency of Secondary Traumatic Stress Symptoms Reported by Juvenile Justice Workers

Criterion (STSS Item #)	Never n (%)	Rarely n (%)	Occasionally n (%)	Often n (%)	Very Often n (%)	M	SD
Criterion B—Intrusion symptoms							
Intrusive thoughts about students (10)	13 (11.0)	33 (18.0)	51 (43.2)	14 (11.9)	7 (5.9)	2.74	.98
Disturbing dreams about students (13)	67 (56.8)	35 (29.7)	13 (11.0)	2 (1.7)	1 (0.8)	1.60	.82
Sense of reliving students' trauma (3)	39 (33.1)	48 (40.7)	27 (22.9)	4 (3.4)	4 (3.4)	1.97	.84
Cued psychological distress (6)	28 (23.7)	47 (39.8)	32 (27.1)	10 (8.5)	1 (0.8)	2.23	.94
Cued physiological reactivity (2)	35 (29.7)	45 (38.1)	30 (25.4)	7 (5.9)	1 (0.8)	2.10	.93
Criterion C—Avoidance symptoms							
Avoidance of students (14)	24 (20.3)	34 (28.8)	48 (40.7)	10 (8.5)	2 (1.7)	2.42	.96
Avoidance of people, places, things (12)	45 (38.1)	40 (33.9)	25 (21.2)	6 (5.1)	2 (1.7)	1.98	.98
Inability to recall student information (17)	42 (35.6)	47 (39.8)	21 (17.8)	7 (5.9)	1 (0.8)	1.97	.92
Diminished activity level (9)	26 (22.0)	47 (39.8)	29 (24.6)	15 (12.7)	1 (0.8)	2.31	.98
Detachment from others (7)	39 (33.1)	37 (31.4)	28 (23.7)	11 (9.3)	3 (2.5)	2.17	1.07
Emotional numbing (1)	31 (26.3)	34 (28.8)	43 (36.4)	9 (7.6)	1 (0.8)	2.28	.97
Foreshortened future (5)	20 (16.9)	35 (29.7)	44 (37.3)	10 (8.5)	9 (7.6)	2.60	.94
Criterion D—Arousal symptoms							
Difficulty sleeping (4)	34 (28.8)	35 (29.7)	33 (28.0)	7 (5.9)	9 (7.6)	2.34	1.18
Irritability (15)	17 (14.4)	45 (38.1)	37 (31.4)	15 (12.7)	4 (3.4)	2.53	1.00
Difficulty concentrating (11)	22 (18.6)	45 (38.1)	37 (31.4)	12 (10.2)	2 (1.7)	2.38	.96
Hypervigilance (16)	33 (28.0)	52 (44.1)	25 (21.2)	5 (4.2)	3 (2.5)	2.09	.92
Easily startled (8)	35 (29.7)	52 (44.1)	25 (21.2)	4 (3.4)	2 (1.7)	2.03	.90

Note: SD = standard deviation

Endorsement of the seven Avoidance symptoms ranged from 53.4% for sense of foreshortened future to 50.9% for avoidance of students. Rates of endorsement of the remaining avoidance symptoms were as follows: emotional numbing (44.8%); diminished interest or participation in activities (38.1%); detachment from others (35.5%); avoidance of people, places, or things that served as reminders of work with traumatized students (28%); and inability to recall information related to work with students (24.5%).

Among the five Arousal symptoms, irritability and concentration difficulties were reported by 41.5% and 47.5% of the sample, respectively. In addition, sleep disturbance were reported by 41.5%, whereas hypervigilance and exaggerated startle reflex were less frequently reported (27.9% and 26.3%, respectively).

The number of respondents who met the core (i.e., B, C, and D) diagnostic criteria for PTSD due to exposure to traumatic events through their patients was also examined. As delineated in the *DSM-IV-TR* (APA, 2000), PTSD is precipitated by an individual's exposure, direct or indirect, to a traumatic event, with the person's response involving fear, helplessness, or horror (Criterion A). Indirect exposure through providing clinical services to traumatized populations fulfills this criterion. In addition, a person must display at least one reexperiencing (Criterion B), three avoidance (Criterion C), and two hyperarousal (Criterion D) symptoms. Thus, an algorithm can be used to determine PTSD "caseness" based on responses (endorsements) in these four criteria (Bride, 2007). As previously noted, a symptom was considered endorsed if the corresponding STSS item is rated 3 or higher (i.e., occasionally, often, or very often). While this operationalization of PTSD caseness does not take into account the *DSM-IV-TR* duration (E) and impairment (F) criteria, it is a common approach in traumatic stress research.

Table 4 presents the number and percentage of study participants who met each of the diagnostic criteria alone, in combination, and not at all. Despite working with traumatized students, 18.6% of

Table 4. Frequency of Endorsement of Posttraumatic Stress Disorder Diagnostic Criteria B, C, and D

Criteria Met	<i>n</i>	%
None	22	18.6
Intrusion (B)	90	76.3
Avoidance (C)	59	50.0
Arousal (D)	58	49.2
Intrusion + Avoidance (B + C)	54	45.8
Intrusion + Arousal (B + D)	47	39.8
Avoidance + Arousal (C + D)	56	47.5
Intrusion + Avoidance + Arousal (B + C + D)	46	39.0

Table 5. Descriptive Statistics for the Full STSS and Subscales Scores

	<i>M</i> (<i>SD</i>)	Range		Percentile					α
		Possible	Observed	25th	50th	75th	90th	95th	
Intrusion	10.64 (3.19)	5–25	5–18	8	11	13	15	17	0.74
Avoidance	15.73 (4.90)	7–35	7–28	12	15	19	22	25	0.83
Arousal	11.37 (3.79)	5–25	5–23	9	11	13	17	19	0.81
Full STSS	37.74 (10.74)	17–85	17–63	30	38	44	53	58	0.92

Note: STSS = Secondary Traumatic Stress Scale.

respondents did not meet any of the diagnostic criteria other than exposure. However, 81.4% met at least one, 55.1% met two, and 39.0% met all three core diagnostic criteria for PTSD. Note that frequencies of the three diagnostic criteria are nonexclusive of each other.

Lastly, Table 5 presents normative statistics, including means, standard deviations, ranges, and selected percentile scores for the STSS and each of its subscales obtained from the study sample. Examination of this data provides information regarding the range of symptom severity experienced by respondents.

Discussion

As with all research, the present study has certain limitations that must be acknowledged before discussing the results. First, the participants were DJJ workers who elected to attend a self-care session at a conference. As these participants may have selected this session because they were experiencing STS symptoms, rates of STS may be higher in this sample than in the DJJ employee population at large. It is also possible that more manager-level staff are likely to attend the conference than the entry-level staff, which makes it difficult to generalize to the overall DJJ worker. Second, the STS rates were obtained via the administration of the STSS. Although the STSS has strong reliability and validity, use of clinical interviews may have produced different results. Third, this is a single, moderately sized study. Future research should be conducted to determine if the results are replicable. Fourth, the results may not be generalizable beyond the sample. Replication of this study with other samples is necessary to determine if the results hold in different correctional systems. Additional study using a longitudinal research design may be beneficial in understanding the effects of STS among juvenile justice staff.

Despite these limitations, this study is important in that it is the first to investigate STS among correctional staff. Specifically, the purpose of this study was to examine the STS levels for juvenile

justice educational staff. The results indicate that staff who engage in direct practice are highly likely to be exposed to traumatic events through their work with traumatized populations. In this sample, only 18.6% of the juvenile justice workers did not meet any of the diagnostic criteria other than exposure, and for social workers, 45% did not meet any of the diagnostic criteria. With juvenile justice workers, 81.4% met at least one, 55.1% met two, and 39.0% met all three core diagnostic criteria for PTSD, whereas with social workers, 55% met at least one, 25% met two, and 15.2% met all three core diagnostic criteria.

These findings yield important recommendations for individual DJJ staff and the organizational structure. One recommendation is to increase the juvenile justice workers' awareness and education about the existence of STS, its signs and symptoms, the associated risk factors, and ways to seek support. Supervisors of juvenile justice staff should also receive additional training on how to recognize the symptoms and expectations if staff members who struggle with STS are identified. Staff development workshops on trauma therapy can also be used to teach juvenile justice workers methods to prevent and/or identify symptoms of STS. Furthermore, in addition to formal counseling available through insurance plans, an ongoing informal support network can be developed to help staff deal with their reactions to the traumatic events shared by the detained youth.

Although this study focused on DJJ teachers, attention should be given to all staff in the criminal and juvenile justice institutional structure who interact with offenders and thus are also at risk; this includes mental health workers, correctional officers, and administrative staff. STS can be experienced by professionals who work with client trauma even for a short period of time. The short time period can also affect individuals who report the incidents or refer individuals to helping professionals. Research should also be conducted to examine the impact on professionals who believe that some of the trauma experiences reported in the facilities have been fabricated for manipulation purposes.

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References

- Abram, K. M., Teplin, L. A., Charles, D. R., Longworth, S. L., McClelland, G. M., & Dulcan, M. K. (2004). Post-traumatic stress disorder and trauma in youth in juvenile detention. *Archives of General Psychiatry*, *61*, 403-410.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders*. (4th ed., Text Rev.). Washington, DC: Author.
- Arvay, M. J., & Uhlemann, M. R. (1996). Counsellor stress in the field of trauma: A preliminary study. *Canadian Journal of Counselling*, *30*, 193-210.
- Bell, H., Kulkarni, S., & Dalton, L. (2003). Organizational prevention of vicarious trauma. *Families in Society*, *84*, 463-470.
- Brady, J. L., Guy, J. D., Poelstra, P. L., & Brokaw, B. F. (1999). Vicarious traumatization, spirituality, and the treatment of sexual abuse survivors: A national survey of women psychotherapists. *Professional Psychology: Research and Practice*, *30*, 386-393.
- Bride, B. E. (2004). The impact of providing psychosocial services to traumatized populations. *Stress, Trauma, and Crisis: An International Journal*, *7*, 29-46.
- Bride, B. E. (2007). Prevalence of secondary traumatic stress among social workers. *Social Work*, *52*, 63-70.
- Bride, B. E., Hatcher, S., & Humble, M. (2009). Trauma, trauma practices, and secondary traumatic stress among substance abuse counselors. *Traumatology*, *15*, 96-105.

- Bride, B. E., Jones, J. L., & MacMaster, S. A. (2007). Correlates of secondary traumatic stress in child protective service workers. *Journal of Evidence-Based Social Work, 4*, 69-80.
- Bride, B. E., Robinson, M. M., Yegidis, B., & Figley, C. R. (2004). Development and validation of the secondary traumatic stress scale. *Research on Social Work Practice, 14*, 27-35.
- Buka, S. L., Stichick, T. L., Birdthistle, I., & Earls, F. J. (2001). Youth exposure to violence: Prevalence, risks and consequences. *American Journal of Orthopsychiatry, 71*, 298-310.
- Burton, D., Foy, D., Bwanausi, C., Johnson, J., & Moore, L. (1994). The relationship between traumatic exposure, family dysfunction and post-traumatic stress symptoms in male juvenile offenders. *Journal of Traumatic Stress, 7*, 83-92.
- Costello, E., Erkanli, A., Fairbank, J., & Angold, A. (2002). The prevalence of potentially traumatic events in childhood and adolescence. *Journal of Traumatic Stress, 15*, 99-112.
- Courtois, C. A. (1988). *Healing the incest wound: Adult survivors in therapy*. New York, NY: W. W. Norton.
- Cunningham, M. (2003). Impact of trauma work on social work clinicians: Empirical findings. *Social Work, 48*, 451-459.
- Danieli, Y. (1988). Confronting the unimaginable: Psychotherapists' reactions to victims of the Nazi Holocaust. In J. P. Wilson, Z. Harel, & B. Kahana (Eds.), *Human adaptation to extreme stress: From the Holocaust to Vietnam* (pp. 219-238). New York, NY: Plenum Press.
- 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, NY: Brunner/Mazel.
- Figley, C. R. (1999). Compassion fatigue: Toward a new understanding of the costs of caring. In B. H. Stamm (Ed.), *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators* (2nd ed., pp. 3-28). Lutherville, MD: Sidran Press.
- Fitzpatrick, K. M. (1993). Exposure to violence and presence of depression among low-income African-American youth. *Journal of Consulting and Clinical Psychology, 61*, 528-531.
- Follette, V. M., Polusny, M. M., & Milbeck, K. (1994). Mental health and law enforcement professionals: Trauma history, psychological symptoms, and impact of providing services to child sexual abuse survivors. *Professional Psychology: Research and Practice, 25*, 275-282.
- Ghahramanlou, M. A., & Brodbeck, C. (2000). Predictors of secondary trauma in sexual assault trauma counselors. *International Journal of Emergency Mental Health, 2*, 229-240.
- Gianconia, R. M., Reinherz, H., Silverman, A. B., Pakiz, B., Frost, A. K., & Cohen, E. (1995). Traumas and posttraumatic stress disorder in a community population of older adolescents. *Journal of the American Academy of Adolescent Psychiatry, 34*, 1369-1379.
- Gilvarry, E. (2000). Substance abuse in young people. *Journal of Child Psychology and Psychiatry, 41*, 55-80.
- Haley, S. A. (1974). When the patient reports atrocities: Specific treatment considerations of the Vietnam veteran. *Archives of General Psychiatry, 30*, 191-196.
- Herman, J. L. (1992). *Trauma and recovery*. New York, NY: Basic Books.
- Horowitz, K., Weine, S., & Jekel, J. (1995). PTSD symptoms in urban adolescent girls: Compounded community trauma. *Journal of American Academy of Child and Adolescent Psychiatry, 34*, 1353-1361.
- Kassam-Adams, N. (1999). The risks of treating sexual trauma: Stress and secondary trauma in psychotherapists. In B. H. Stamm (Ed.), *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators* (pp. 37-48). Towson, MD: Sidran Institute.
- Kering, P. K., Ward, R. M., Vanderzee, K. L., & Moeddel, M. A. (2009). Posttraumatic stress as a mediator of the relationship between trauma and mental health problems among juvenile delinquents. *Journal of Youth and Adolescence, 38*, 1214-1225.
- Kilpatrick, D. G., Aciero, R., Saunders, B., Resnick, H., Best, C., & Schnurr, P. P. (2000). Risk factors for adolescent substance abuse and dependence: Data from a national sample. *Journal of Consulting and Clinical Psychology, 68*, 19-30.

- Martin, S. L., Gordon, T. E., & Kupersmith, J. B. (1995). Survey of exposure to violence among the children of migrant and seasonal farm workers. *Public Health Reports, 110*, 268-276.
- 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.
- Meldrum, L., King, R., & Spooner, D. (2002). Secondary traumatic stress in case managers working in community mental health services. In C. Figley (Ed.), *Treating compassion fatigue* (pp. 85-106). New York, NY: Brunner-Routledge.
- Miller, L. S., Wasserman, G. A., Neugebauer, R., Gorman-Smith, D., & Kamboukos, D. (1999). Witnessed community violence and antisocial behavior in high-risk, urban boys. *Journal of Clinical Child Psychology, 28*, 2-11.
- Newman, E. (2002). Assessment of PTSD and trauma exposure in adolescents. *Journal of Aggression, Maltreatment and Trauma, 6*, 59-77.
- Osofsky, J. D. (1995). The effects of exposure to violence on young children. *American Psychologist, 50*, 782-788.
- Pearlman, L. A., & Mac Ian, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. *Professional Psychology: Research and Practice, 26*, 558-565.
- Rheingold, A. A., Smith, D. W., Ruggiero, K. J., Saunders, B. E., Kilpatrick, D. G., & Resnick, H. S. (2003). Loss, trauma exposure, and mental health in a representative sample of 12-17-year-old youth: Data from the national survey of adolescents. *Journal of Loss and Trauma, 9*, 1-19.
- Ruchkin, V., Schwab-Stone, M., Koposov, R., Vermeiren, R., & Steiner, H. (2002). Violence exposure, post-traumatic stress, and personality in juvenile delinquents. *Journal of the American Academy of Child and Adolescent Psychiatry, 41*, 322-329.
- Ryan, J. P., & Testa, M. F. (2005). Child maltreatment and juvenile delinquency: Investigating the role of placement and placement stability. *Children and Youth Services Review, 27*, 227-249.
- Schauben, L. J., & Frazier, P. A. (1995). Vicarious trauma: The effects on female counselors of working with sexual violence survivors. *Psychology of Women Quarterly, 19*, 49-64.
- Slattery, S. M., & Goodman, L. A. (2009). Secondary traumatic stress among domestic violence advocates: Workplace risk and protective factors. *Violence Against Women, 15*, 1358-1379.
- Steiner, H., Garcia, I., & Matthews, Z. (1997). Posttraumatic stress disorder in incarcerated juvenile delinquents. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 357-365.
- U.S. Department of Justice. (2006). *Crime in the United States 2005*. Washington, DC: Federal Bureau of Investigation.
- VanBergeijk, E., & Sarmiento, T. (2006). The consequences of reporting child maltreatment: Are school personnel at risk for secondary traumatic stress? *Brief Treatment and Crisis Intervention, 6*, 79-98.
- Wolpaw, J. M., & Ford, J. D. (2004). *Assessing exposure to psychological trauma in the juvenile justice population*. Retrieved from National Traumatic Stress Network website http://www.nctsn.org/nctsn_assets/pdfs/edu_materials/assessing_trauma_in_jj_population.pdf