Journal of Child & Adolescent Trauma (2022) 15:553–565
https://doi.org/10.1007/s40653-021-00408-3

ORIGINAL ARTICLE

The Role of Children's PTSD Symptomatology in Non-Offending Caregivers' Secondary Traumatic Stress Symptomatology Following Disclosures of Sexual or Physical Abuse

Ani Mangold[1,2] · **Alan R. King**[1] · **Nicola A. Herting**[1,2]

Accepted: 16 September 2021 / Published online: 13 October 2021

Abstract

This research examined factors influencing levels of secondary traumatic stress (STS) in non-offending caregivers (NOCs) of children with histories of sexual or physical abuse. These factors included the nature of the abuse, NOCs' relationships with the initiators of the abuse, children's ages and genders, NOCs' trauma histories, and the elapsed time between children's disclosures of abuse and their trauma assessments. As a secondary objective, this research examined the interactions between children's self-reports of their own posttraumatic stress disorder (PTSD) symptomatology, NOCs' estimates of their children's PTSD symptomatology, and NOCs' self-reports of their own STS symptomatology.Participants from a clinical sample ($N = 300$, *children* = 150, *NOCs* = 150; child age $M = 9.89$, $SD = 4.08$; NOC age $M = 37.87$, $SD = 9.23$) completed structured intake interviews, the PTSD Checklist for the DSM-5 (PCL-5) and the Child PTSD Symptom Scale (CPSS; Child-Report and NOC-Report). Analytic strategies included point-biserial correlation coefficient calculations, linear regression analyses, and Analyses of Covariance (ANCOVAs).NOCs' levels of STS were impacted by their relationships with the initiators of the abuse and their own trauma histories. NOCs' self-reported STS symptomatology mirrored their estimates of their children's PTSD symptomatology. The discrepancy scores between children's self-reports of their PTSD symptomatology and NOCs' estimates of children's PTSD symptomatology were impacted by children's ages and genders.Clinical practitioners should note the importance of examining children's PTSD symptomatology and NOCs' STS symptomatology concurrently when making recommendations for trauma-informed evidence-based treatments.

Keywords Secondary traumatic stress · Non-offending caregivers · Children · Sexual abuse · Physical abuse · PCL-5 · CPSS

Non-offending caregivers (NOCs) of children who have endured one or more potentially traumatic events (PTEs) must process their children's disclosures and cope with the physical, emotional, and behavioral changes that often follow. In doing so, NOCs may develop *secondary traumatic stress* symptomatology (STS; Arzi et al., 2000; Banyard et al., 2001; Eriksson et al., 2001; Goff & Smith, 2005; Landolt et al., 2003; Lind, 2000; Lugris, 2000). This research defines STS as a set of psychological symptoms that mimic posttraumatic stress disorder (PTSD) that are present in NOCs following children's disclosures of PTEs (Baird & Kracen, 2006; Bramsen et al., 2002; Coughlan & Parkin, 1987; Lind, 2000; Lugris, 2000; Nelson & Wright, 1996; Pearlman & MacIan, 1995).

Clinical evidence indicates that traumatic stress symptomatology can negatively impact NOCs' functioning, ability to parent effectively, and ability to be sensitive to their children's needs (Barker-Collo & Read, 2003; Breslau, 2009; Elliott & Carnes, 2001; Kouyoumdjian et al., 2005; Lovett, 2004; Plummer, 2006; Saywitz et al., 2000; Vogt et al., 2007). Because a lack of caregiver support, nurturing, and affection are associated with increased traumatic stress symptomatology in children (Lipton, 1997), it is imperative that NOCs who are exhibiting STS receive their own trauma-informed, evidence-based services.

✉ Ani Mangold
ani.mangold@und.edu

[1] Department of Psychological Sciences, University of North Dakota, Grand Forks, ND, USA

[2] Red River Children's Advocacy Center, Fargo, ND, USA

Previous research on STS in NOCs of children with trauma histories focuses nearly entirely on NOC demographics as moderators of STS. These demographics include age (Adams et al., 2001; Resick, 2000), gender (Corcoran, 2004), education and socio-economic status (Resick, 2000), style of coping (Shalev & Ursano, 2003), and previous psychological well-being (Brewin et al., 2000; Resick, 2000). The purpose of this research was to expand upon previous research and examine additional factors that may influence levels of STS in NOCs of children with trauma histories. These factors included the nature of the abuse, NOCs' relationships with the initiators of the abuse, children's ages and genders, NOCs' trauma histories, and the elapsed time between children's disclosures of abuse and their trauma assessments. As a secondary objective, this research examined the interactions between children's self-reports of their own posttraumatic stress disorder (PTSD) symptomatology, NOCs' estimates of their children's PTSD symptomatology, and NOCs' self-reports of their own STS symptomatology.

Factors Influencing Levels of Secondary Traumatic Stress in Non-Offending Caregivers

Type of Abuse

Considerable evidence demonstrates that non-offending caregivers (NOCs) of sexually abused children experience significant distress following their children's disclosures of sexual abuse (Knott & Fabre, 2014; Myrick & Green, 2013; Runyon et al., 2014; Trickett et al., 2011; van Toledo & Seymour, 2013). Multiple empirical studies (Jobe-Shields et al., 2016) have documented clinically significant trauma symptomatology in NOCs following children's disclosures of sexual abuse. However, there are no known studies that exclusively examine NOCs' adjustment following children's disclosures of physical abuse. The present study examined whether trauma symptomatology was significantly higher in NOCs of children who experienced sexual abuse as opposed to physical abuse.

Non-Offending Caregivers' Relationships with the Initiators of Abuse

Non-offending mothers have been found to be less supportive of their children when the initiators of abuse were current romantic partners (Everson et al., 1989; Faller, 1988; Pintello & Zuravin, 2001). The more the allegations of abuse affect non-offending mothers' lifestyles and overall senses of self, the less likely mothers are to believe their children (Elliot & Briere, 1994; Gomes-Schwartz et al., 1990; Lawson & Chaffin, 1992; Sirles & Franke, 1989). Non-offending mothers also have more difficulty believing allegations against current partners when they have new, intense feelings for their partners or rely on their partners financially (Elliot & Briere, 1994; Everson et al., 1989; Faller, 1984; Gomes-Schwartz et al., 1990; Leifer et al., 2001; Sirles & Franke, 1989). Regarding symptoms of secondary traumatic stress (STS), non-offending mothers experience high Intrusion and Avoidance symptomatology following their children's disclosures of abuse when the initiators of the abuse are outside of their immediate families (Manion et al., 1996). The present study examined whether trauma symptomatology was significantly higher between NOCs who were in romantic relationships with the initiators of their children's abuse as opposed to NOCs who were not in romantic relationships with the initiators of their children's abuse.

Non-Offending Caregivers' Personal Trauma Histories

A multitude of researchers have reported that maternal responses to disclosures of sexual abuse are not associated with their own childhood trauma histories (Deblinger et al., 1994; Heriot, 1996; Hubbard, 1989; Leifer et al., 2001; Salt et al., 1990). Other research has demonstrated that individuals' trauma histories often affect their current levels of distress beyond what is accounted for by the current stressors (Ensel & Lin, 1998). Some individuals have been found to have more severe anxiety symptoms than those without adverse childhood experiences after experiencing potentially traumatic events in adulthood (Brewin et al., 2000; Pierce, 2000; Resick, 2000). Trauma histories are also indicators of traumatic stress symptomatology even when individuals only experience a traumatic event vicariously (Marmar et al., 1996; Resick, 2000; Van der Kolk et al., 1996). The present study examined whether levels of STS in NOCs significantly differed among NOCs with trauma histories congruent with their children's trauma histories (e.g., NOCs and their children each experienced childhood sexual abuse), NOCs with trauma histories incongruent with their children's trauma histories (i.e., NOCs who experienced domestic violence as adults), and NOCs without trauma histories. It was predicted that NOCs who experienced domestic violence as adults would experience significantly higher STS symptomatology compared to NOCs in the other two groups.

Children's Ages and Genders

Previous research demonstrates that non-offending mothers of toddlers readily believed their children's disclosures of abuse, whereas non-offending mothers of adolescents demonstrated more hesitancy (Lyon & Kouloumpos-Lenares, 1987; Sirles & Franke, 1989). Other studies have found that younger children were more likely to be believed (Pintello &

Zuravin, 2001) and supported (Lipton, 1997) by their NOCs than older children (Salt et al., 1990). These studies also found that NOCs were more likely to believe (Pintello & Zuravin, 2001), protect (Salt et al., 1990), and help (Lyon & Kouloumpos-Lenares, 1987) male children over female children. The present study examined whether levels of STS were significantly higher in NOCs of children in preschool or elementary school (ages 3 to 10) as opposed to children in middle school or high school (ages 11 to 18). The present study also examined if levels of STS were significantly higher among NOCs of male children as opposed to female children.

Relationships between Estimated and Self-Reported Traumatic Stress Symptomatology

Some studies have documented concordant traumatic stress symptomatology in children and NOCs that were exposed to the same traumatic event (Barakat et al., 1997; Daviss et al., 2000; De Vries et al., 1999; Kassam-Adams et al., 2006). Other reviews of studies have found no correlations between children and NOCs' self-reported traumatic stress symptomatology (Landolt et al., 2003). In a study of incestuous abuse initiated by biological fathers, non-offending mothers' self-reported levels of distress were significantly related to children's self-reported fear and anxiety (Hanson et al., 1992). Conversely, one study wherein NOCs estimated their children's PTSD symptomatology found that NOCs' estimates of their children's PTSD symptomatology were poorly correlated with their children's self-reported PTSD symptomatology. Instead NOCs' estimates were driven by their own traumatic reactions and symptoms (Valentino et al., 2010). It is important to note, however, that this study did not utilize parallel instruments to measure NOCs' and children's reports of their own traumatic stress symptomatology. The present study specifically examined relationships between NOCs' and children's reports of traumatic stress symptomatology using parallel instruments.

Elapsed Time Between Children's Disclosures of Abuse and Trauma Assessments

There is a paucity of research examining levels of STS in NOCs while considering the elapsed time between children's disclosures of abuse and trauma assessments. Further, studies examining NOCs' levels of belief and support following disclosures of abuse are often fraught with methodological difficulties because belief and support are not static constructs (Elliott & Carnes, 2001). Evidence also suggests that NOCs' initial reactions are not always accurate predictors of their ability to believe and support their children at different points in the future (Salt et al., 1990). Given this evidence, it is possible that NOCs' levels of STS may vary based on the elapsed time between children's disclosures of abuse and trauma assessments. Therefore, this research included elapsed time between children's disclosures of abuse and trauma assessments as a covariate in all relevant analyses.

Method

Participants and Procedure

Data for this research was gathered at a children's guidance clinic in the Midwestern United States during children's brief trauma assessments. Permission to use the data was obtained from the center's executive director, and study protocols were approved by an institutional review board. At the time of analysis, the center had collected data from 150 sets of children and their non-offending caregivers (NOCs). The final sample ($N = 300$, *children* = 150, *NOCs* = 150) varied in its composition— children's genders ($F = 74\%$, $M = 26\%$), NOCs' genders ($F = 80\%$, $M = 20\%$), children's ages ($M = 9.89$, $SD = 4.08$), NOCs' ages ($M = 37.87$, $SD = 9.23$), children's ethnicities (*Caucasian* = 74%, *Black or African American* = 4%, *Hispanic or Latinx* = 10.7%, *American Indian or Alaskan Native* = 6.7%, and *Biracial* = 4.7%), and abuse type (*sexual abuse* = 88%, *physical abuse* = 12%).

Materials

Structured Intake Interviews

Children and their non-offending caregivers (NOCs) were interviewed about their personal trauma histories during structured intake interviews. Due to the limited sample size, children who experienced poly-victimization (i.e., both sexual and physical abuse) were not included in this study.

The Posttraumatic Stress Disorder Checklist for the DSM-5 (PCL-5)

The PCL-5 (Blevins et al., 2015) is a self-report instrument that assesses the 20 symptoms of posttraumatic stress disorder (PTSD) listed in the Diagnostic and Statistical Manual of Mental Disorders—Fifth Edition (DSM-5). NOCs endorsed items on the PCL-5 based on their experiences one month prior to completing the PCL-5. The present study utilized the PCL-5 to measure NOCs' secondary traumatic stress (STS) symptomatology regarding their children's disclosures of sexual or physical abuse.

PCL-5 Global scores range from 0 to 80. Intrusion, Avoidance, Negative Alterations in Cognitions and Mood, and Alterations in Arousal and Reactivity Subscale scores range from 0 to 20, 0 to 8, 0 to 28, and 0 to 24, respectively. A cutoff score of 33 can be used to identify clinically

significant STS in NOCs (Blevins et al., 2015). The psychometric properties of the PCL-5 were assessed by the developers of the PCL-5 (Blevins et al., 2015). PCL-5 scores exhibit strong internal consistency ($\alpha = 0.94$), test–retest reliability ($r = 0.82$), convergent validity ($rs = 0.74$ to 0.85), and discriminant validity ($rs = 0.31$ to 0.60).

The Child Posttraumatic Stress Disorder Symptom Scale (CPSS)

The CPSS (Foa et al., 2001) measures the severity of PTSD symptoms and functional impairment in children between the ages of 7 and 18 as reported by children and their NOCs, respectively. All children and NOCs completed the CPSS about the children's disclosures of sexual or physical abuse.

CPSS Global scores range from 0 to 80. Intrusion, Avoidance, Negative Alterations in Cognitions and Mood, and Alterations in Arousal and Reactivity Subscale scores range from 0 to 20, 0 to 8, 0 to 28, and 0 to 24, respectively. A cutoff score of 31 can be used to identify probable PTSD diagnoses in children (Foa et al., 2018). CPSS Global scores have demonstrated high internal consistency, with alpha coefficients of 0.93 and 0.91, respectively (Stewart et al., 2017).

The present study examined whether children's self-reported PTSD symptomatology on the CPSS correlated with NOCs' estimates of their children's PTSD symptomatology on the CPSS. The present study then determined whether children and NOCs' CPSS scores accounted for any distinct variance in NOCs' self-reported STS symptomatology on the PCL-5 (which directly parallels each item on the CPSS). Finally, the present study examined whether children's ages and genders influenced discrepancies between children's self-reported PTSD symptomatology on the CPSS and NOCs' estimates of their children's PTSD symptomatology on the CPSS.

Aims and Analytic Strategy

The present study calculated point-biserial correlation coefficients to determine the strength of the interactions between NOCs' self-reports of STS on the PCL-5 and children's disclosures of sexual abuse and physical abuse, NOCs' relationships with the initiators of the abuse, children's ages and genders, and CPSS Global and Subscale scores (Children's reports and NOCs' estimates). Next, Analyses of Covariance (ANCOVAs) were calculated to determine if NOCs' relationships with the initiators of abuse, and congruent and incongruent child and NOC trauma histories predicted NOCs' self-reports of their own STS symptomatology on the PCL-5. Additionally, independent linear regression analyses assessed the extent to which the nature of the abuse, NOCs' relationships with the initiators of the abuse, children's ages and genders, and NOCs' CPSS Global and Subscale scores predicted NOCs' self-reports of their own STS symptomatology on the PCL-5. As a secondary objective, this research calculated point-biserial correlation coefficients to determine interaction strengths between discrepancy scores (i.e., the difference between children's self-reports of their own PTSD symptomatology on the CPSS and NOCs' estimates of their children's PTSD symptomatology on the CPSS) and the nature of the abuse, NOCs' relationships with the initiators of the abuse, and children's ages and genders. Finally, ANCOVAs were calculated to determine if children's ages and genders predicted discrepancy scores between children's self-reported PTSD symptomatology and NOCs' estimates of their children's PTSD symptomatology. Variance accounted for by the elapsed time between children's disclosures of abuse and their trauma assessments was controlled for in all relevant statistical analyses.

Results

Descriptive Statistics

Tables 1 and 2 provide descriptive statistics for Secondary Traumatic Stress (STS) predictor variables and symptomatology reported on the PCL-5, CPSS-Child Report, and CPSS-Non-Offending Caregiver (NOC) Report. Of note, all NOCs who indicated personal trauma histories that were incongruent with their children's trauma histories (23.3%) reported experiencing domestic violence prior to their

Table 1 Descriptive Statistics for Predictors of Secondary Traumatic Stress Symptomatology

Predictors of STS Symptomatology	**Cell Proportional Assignments**		
Nature of the Abuse	Sexual Abuse = 88%	Physical Abuse = 12%	
NOC Relationship with Initiator of Abuse	Romantic Partner = 31.7%	Other Known Person = 68.3%	
Child Age	3 to 10 = 53.3%	11 to 18 = 46.7%	
Child Gender	Male = 26%	Female = 74%	
NOC Trauma History	Congruent to Child = 16.7%	Incongruent to Child = 23.3%	No Trauma History = 40%

Table 2 Descriptive Statistics for the Criterion Measures of STS Symptomatology Severity

	N	*M*	*SD*	Range
PCL-5 Global	150	21.120	16.002	0–68
PCL-5 Intrusion	150	6.413	4.965	0–20
PCL-5 Avoidance	150	2.860	2.682	0–8
PCL-5 Negative Alterations in Cognitions and Mood	150	6.300	5.969	0–23
PCL-5 Alterations in Arousal and Reactivity	150	5.500	4.738	0–20
Child CPSS Global	111	30.847	17.903	0–76
Child CPSS Intrusion	111	7.532	5.140	0–20
Child CPSS Avoidance	111	5.414	2.830	0–8
Child CPSS Negative Alterations in Cognitions and Mood	111	8.559	7.014	0–24
Child CPSS Alterations in Arousal and Reactivity	111	9.396	5.858	0–23
NOC CPSS Global	111	17.892	14.022	0–65
NOC CPSS Intrusion	111	3.739	3.926	0–20
NOC CPSS Avoidance	111	2.973	2.768	0–8
NOC CPSS Negative Alterations in Cognitions and Mood	111	5.270	5.210	0–21
NOC CPSS Alterations in Arousal and Reactivity	111	5.910	5.330	0–20

children's disclosures of abuse. CPSS sample sizes ($N = 111$) and the total sample size ($N = 150$) differed in this research due to age constraints placed on the CPSS-Child Report by test developers (i.e. children had to be at least 7 years old to provide self-reports of their own PTSD symptomatology; Foa et al., 2001). Exactly 24% of NOCs were identified as having STS based on the clinical cutoff score of 33 recommended by PCL-5 test developers (Blevins et al., 2015). Per their own self-reports, approximately 44% of children were identified as having a probable PTSD diagnosis based on the clinical cutoff score of 31 identified by CPSS test developers (Foa et al., 2001). Per NOCs' estimates, 18% of children were identified as having a probable PTSD diagnosis based on the clinical cutoff score of 31 identified by CPSS test developers (Foa et al., 2001).

Table 3 demonstrates the nature of the interactions between NOCs' self-reports of their own STS symptomatology (PCL-5) and predictors of STS, children's self-reports of their own PTSD symptomatology (CPSS-Child Report), and NOCs' estimates of their children's PTSD symptomatology (CPSS-NOC Report). Significant point-biserial correlation coefficients were found in 17.1% of

Table 3 Point-Biserial Correlation Matrix of the PCL-5, Predictors of Secondary Traumatic Stress, and CPSS—Child and NOC Reports

	PCL-5 Global *r*	PCL-5 Intrusion *r*	PCL-5 Avoidance *r*	PCL-5 NCM *r*	PCL-5 AAR *r*
Predictors of STS					
Nature of the Abuse	.079	.018	.096	.101	.083
NOC Relationship with Initiator of Abuse	-.188*	-.120	-.202*	-.182*	-.171*
Child Age	-.057	-.027	-.021	-.058	-.085
Child Gender	.144	.120	.191*	.150	.079
CPSS-Child Self-Reported PTSD Symptoms					
Global	.075	.119	-.011	.075	.053
Intrusion	.056	.066	-.019	.090	.038
Avoidance	.129	.160	.005	.137	.100
Negative Alterations in Cognitions and Mood	.060	.111	-.017	.068	.021
Alterations in Arousal and Reactivity	.042	.091	.016	-.007	.057
CPSS-NOC Estimates of Child PTSD Symptoms					
Global	.405***	.404***	.321**	.317**	.364***
Intrusion	.327***	.347***	.227*	.260**	.284**
Avoidance	.208*	.242*	.200*	.163	.137
Negative Alterations in Cognitions and Mood	.312**	.307**	.217*	.245**	.289**
Alterations in Arousal and Reactivity	.411***	.382***	.361***	.318**	.394***

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

Table 4 NOC Relationship with Initiator of Abuse Analyses of Covariance on Secondary Traumatic Stress Symptomatology

	Romantic Partner			Other Known Person			Relationship Significance	
NOC Self-Reported STS Symptomatology	*M*	*SE*	*N*	*M*	*SE*	*N*	*F*	n_{p2}
PCL-5								
Global	25.533	2.324	46	19.368	1.582	99	4.798*	.033
Intrusion	7.342	.734	46	6.104	.500	99	1.937	.013
Avoidance	3.731	.391	46	2.549	.267	99	6.220*	.042
Negative Alterations in Cognitions and Mood	7.805	.854	46	5.666	.582	99	4.273*	.029
Alterations in Arousal and Reactivity	6.654	.692	46	4.979	.471	99	3.999*	.027

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

comparisons between the PCL-5 and predictors of STS. NOCs' relationships with the initiators of abuse were significantly correlated ($p < 0.05$) with PCL-5 Global scores and all PCL-5 Subscale scores aside from Intrusion. These significant correlations indicated a need for additional analyses that examined the relationships between PCL-5 Global and Subscale scores and NOCs' relationships with the initiators of abuse. No significant correlation coefficients were found between the CPSS-Child Report and PCL-5. Significant correlation coefficients were found in all but two comparisons between the CPSS-NOC Report and PCL-5— there were no significant correlation coefficients found between CPSS-NOC Report Avoidance Subscale scores and PCL-5 Negative Alterations in Cognitions and Mood Subscale scores and Alterations in Arousal and Reactivity Subscale scores. Additional bivariate correlation coefficients were calculated to determine whether the elapsed time between children's disclosures of abuse and their trauma assessments was associated with NOCs' estimates of their children's PTSD symptomatology, children's self-reported symptomatology, and NOCs' self-reported STS symptomatology. Elapsed time between children's disclosures of abuse was significantly ($p < 0.05$) correlated with NOCs' estimated and children's self-reported Negative Alterations in Cognitions and Mood symptomatology as well as NOCs' Negative Alterations in Cognitions and Mood STS symptomatology. These symptoms appeared to peak immediately and subside over time.

Table 4 depicts a series of ANCOVAs used to test the predictive value of NOCs' relationships with the initiators of abuse on NOCs' self-reports of their own STS symptomatology on the PCL-5. Variance accounted for by the elapsed time between children's disclosures of abuse and trauma assessments was controlled for in all analyses. PCL-5 Global scores and all PCL-5 Subscale scores, aside from Intrusion Subscale scores, differed significantly ($p < 0.05$) between NOCs who were in romantic relationships with the initiators of the abuse and NOCs who were not in romantic relationships with the initiators of the abuse. Additional ANCOVAs were conducted to test the predictive value of the nature of the abuse, and children's ages and genders on NOCs' self-reports of their own STS symptomatology on the PCL-5. Aside from PCL-5 Avoidance scores being significantly elevated ($p < 0.05$) in NOCs of female children, no significant results were found.

Table 5 depicts a series of ANCOVAs used to test the predictive value of NOCs having trauma histories congruent with their children's trauma histories, trauma histories incongruent with their children's trauma histories, and no trauma histories on NOCs' self-reports of their own STS symptomatology on the PCL-5. Variance accounted for by the elapsed time between the children's disclosures of abuse and trauma assessments was controlled for in all analyses. NOCs' trauma histories congruent with their children's trauma histories were not associated with significant ($p < 0.05$) elevations in PCL-5 scores. PCL-5 Global scores

Table 5 NOC Trauma History Classification Analyses of Covariance on Secondary Traumatic Stress Symptomatology

	No Trauma History			Congruent Trauma History			Incongruent Trauma History			Significance	
NOC Self-Reported STS Symptomatology	*M*	*SE*	*N*	*M*	*SE*	*N*	*M*	*SE*	*N*	*F*	n_{p2}
PCL-5											
Global	17.371[a]	1.808	90	16.697	7.935	25	30.504[b]	4.698	35	3.449*	.046
Intrusion	5.399	.567	90	5.273	2.487	25	8.224	1.472	35	1.623	.022
Avoidance	2.466	.310	90	2.366	1.360	25	4.246	.805	35	2.159	.029
Negative Alterations in Cognitions and Mood	5.184 [a]	.673	90	5.495	2.955	25	10.110 [b]	1.749	35	3.462*	.046
Alterations in Arousal and Reactivity	4.323	.537	90	3.459	2.356	25	7.592	1.395	35	2.537	.018

*$p < .05$; **$p < .01$; ***$p < .001$; [a/b] indicate significantly different group comparisons

and PCL-5 Negative Alterations in Cognitions and Mood Subscale scores differed significantly ($p < 0.05$) between NOCs without trauma histories and trauma histories incongruent with their children's trauma histories.

Table 6 depicts independent linear regression analyses that assessed the extent to which the nature of the abuse, NOCs' relationships with the initiators of the abuse, and children's ages and genders predicted NOCs' self-reports of their own STS symptomatology on the PCL-5. The predictive model for PCL-5 Global scores was significant ($F = 2.424$, $p < 0.05$, Adjusted $R^2 = 0.038$, $SE = 15.694$). The predictive model for PCL-5 Avoidance Subscale scores was significant ($F = 3.157$, $p < 0.05$, Adjusted $R^2 = 0.057$, $SE = 2.605$). The predictive model for PCL-5 Negative Alterations in Cognitions and Mood Subscale scores was significant ($F = 2.564$, $p < 0.05$, Adjusted $R^2 = 0.042$, $SE = 5.844$). NOCs' relationships with the initiators of the abuse accounted for unshared variance in PCL-5 Global scores ($\beta = -0.194$, SE = 2.896, $p = 0.023$), Avoidance Subscale scores ($\beta = -0.211$, SE = 0.481, $p = 0.013$), Negative Alterations in Cognitions and Mood Subscale scores ($\beta = -0.193$, SE = 1.078, $p = 0.024$), and Alterations in Arousal and Reactivity Subscale scores ($\beta = -0.183$, SE = 0.863, $p = 0.033$).

Table 7 depicts independent linear regression analyses that assessed the extent to which NOCs' estimates of their children's PTSD symptoms (CPSS-NOC Report) predicted NOCs' self-reports of their own STS symptomatology on the PCL-5. The predictive model for PCL-5 Global scores was significant ($F = 5.986$, $p < 0.001$, Adjusted $R^2 = 0.153$, $SE = 14.723$). The predictive model for PCL-5 Intrusion Subscale scores was significant ($F = 5.602$, $p < 0.001$, Adjusted $R^2 = 0.143$, $SE = 4.595$). The predictive model for PCL-5 Avoidance Subscale scores was significant ($F = 4.162$, $p < 0.004$, Adjusted $R^2 = 0.103$, $SE = 2.54$). The predictive model for PCL-5 Negative Alterations in Cognitions and Mood Subscale scores was significant ($F = 3.341$, $p < 0.05$, Adjusted $R^2 = 0.078$, $SE = 5.731$). The predictive model for PCL-5 Alterations in Arousal and Reactivity Subscale scores was significant ($F = 5.339$, $p < 0.01$, Adjusted $R^2 = 0.136$, $SE = 4.404$). NOCs' estimates of Alterations in Arousal and Reactivity Subscale scores accounted for unshared variance for PCL-5 Global scores ($\beta = 0.316$, $SE = 0.369$, $p = 0.011$), PCL-5 Intrusion Subscale scores ($\beta = 0.249$, $SE = 0.115$,

Table 6 Regression Prediction Models for Secondary Traumatic Stress Symptomatology Using Secondary Traumatic Stress Predictor Variables

NOC Self- Reported STS Symptomatology	Standardized Beta Coefficients	*SE*	*t*	*p*
PCL-5				
Global				
Nature of the Abuse	-.072	2.695	-.855	.394
NOC Relationship with Initiator of Abuse	-.194	2.896	-2.295	.023*
Child Age	.076	4.475	.839	.403
Child Gender	.127	3.317	1.391	.167
Intrusion				
Nature of the Abuse	-.043	.852	-.500	.618
NOC Relationship with Initiator of Abuse	-.113	.915	-1.307	.193
Child Age	-.005	1.414	-.050	.960
Child Gender	.130	1.048	1.397	.165
Avoidance				
Nature of the Abuse	-.043	.447	-.514	.608
NOC Relationship with Initiator of Abuse	-.211	.481	-2.521	.013*
Child Age	.079	.743	.873	.384
Child Gender	.166	.551	1.842	.068
Negative Alterations in Mood and Cognition				
Nature of the Abuse	-.075	1.004	-.894	.373
NOC Relationship with Initiator of Abuse	-.193	1.078	-2.284	.024*
Child Age	.100	1.666	1.099	.274
Child Gender	.125	1.235	1.370	.173
Alterations in Arousal and Reactivity				
Nature of the Abuse	-.088	.804	-1.035	.303
NOC Relationship with Initiator of Abuse	-.183	.863	-2.154	.033*
Child Age	.108	1.334	1.180	.240
Child Gender	.053	.989	.581	.562

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

Table 7 Regression Prediction Models for Secondary Traumatic Stress Symptomatology Using the CPSS—NOC Report

NOC Self- Reported STS Symptomatology	Standardized Beta Coefficients	*SE*	*t*	*p*
PCL-5				
Global				
CPSS Intrusion	.143	.472	1.230	.222
CPSS Avoidance	-.014	.616	-.135	.893
CPSS Negative Alterations in Cognitions and Mood	.035	.378	.286	.775
CPSS Alterations in Arousal and Reactivity	.316	.369	2.573	.011*
Intrusion				
CPSS Intrusion	.176	.147	1.513	.133
CPSS Avoidance	.029	.192	.271	.787
CPSS Negative Alterations in Cognitions and Mood	.036	.118	.294	.769
CPSS Alterations in Arousal and Reactivity	.249	.115	2.017	.046*
Avoidance				
CPSS Intrusion	.031	.082	.259	.796
CPSS Avoidance	.064	.106	.579	.564
CPSS Negative Alterations in Cognitions and Mood	-.066	.065	-.522	.603
CPSS Alterations in Arousal and Reactivity	.361	.064	2.858	.005*
Negative Alterations in Cognitions and Mood				
CPSS Intrusion	.120	.184	.994	.323
CPSS Avoidance	-.013	.240	-.116	.908
CPSS Negative Alterations in Cognitions and Mood	.033	.147	.256	.799
CPSS Alterations in Arousal and Reactivity	.236	.143	1.839	.069
Alterations in Arousal and Reactivity				
CPSS Intrusion	.123	.141	1.053	.295
CPSS Avoidance	-.087	.184	-.813	.418
CPSS Negative Alterations in Cognitions and Mood	.044	.113	.357	.722
CPSS Alterations in Arousal and Reactivity	.334	.110	2.696	.008**

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

$p = 0.046$), PCL-5 Avoidance Subscale scores ($\beta = 0.361$, $SE = 0.064$, $p = 0.005$), and PCL-5 Alterations in Arousal and Reactivity Subscale scores ($\beta = 0.334$, $SE = 0.110$, $p = 0.008$). Additional independent linear regression analyses were conducted to assess the extent to which children's self-reports of their own PTSD symptomatology (CPSS—Child Report) predicted NOCs' self-reports of their own STS symptomatology on the PCL-5. No significant results were found.

Table 8 demonstrates the nature of the interactions between discrepancy scores (i.e., the difference between children's self-reports of their own PTSD symptomatology on the CPSS and NOCs' estimates of their children's PTSD symptomatology on the CPSS) and discrepancy score predictors. Significant point-biserial correlation coefficients were found in 26.7% of comparisons. The interactions between CPSS Global and Intrusion discrepancy scores and children's ages and genders were significant ($p < 0.05$). These results indicate that having older children and female children were associated with fewer discrepancies between NOCs' estimates and children's self-reported PTSD symptomatology overall and with regard to Intrusion

Table 8 Point-Biserial Correlation Matrix of Discrepancy Score Predictors

	CPSS Global *r*	CPSS Intrusion *r*	CPSS Avoidance *r*	CPSS NCM *r*	CPSS AAR *r*
Discrepancy Score Predictors					
Nature of the Abuse	-.089	-.028	-.112	-.153	-.003
NOC Relationship with Initiator of Abuse	-.177	-.096	-.103	-.223*	-.128
Child Age	-.228*	-.218*	-.065	-.231*	-.174
Child Gender	-.192*	-.264**	-.050	-.187	-.090

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

Table 9 Biserial Correlation Matrix of the PCL-5 and CPSS Discrepancy Scores

	PCL-5 Global *r*	PCL-5 Intrusion *r*	PCL-5 Avoidance *r*	PCL-5 NCM *r*	PCL-5 AAR *r*
CPSS Discrepancy Scores					
Global	.223*	.181	.241*	.160	.214*
Intrusion	.171	.176	.170	.096	.158
Avoidance	.061	.063	.156	.019	.028
Negative Alterations in Cognitions and Moods	.156	.107	.162	.105	.177
Alterations in Arousal and Reactivity	.277**	.214*	.261**	.247**	.253**

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

symptomatology. NOCs' relationships with the initiators of the abuse and children's ages were significantly ($p < 0.05$) correlated with CPSS Negative Alterations in Cognitions and Mood.

Table 9 demonstrates the nature of the interactions between discrepancy scores (i.e., the difference between children's self-reports of their own PTSD symptomatology on the CPSS and NOCs' estimates of their children's PTSD symptomatology on the CPSS) and NOCs' self-reports of their own STS symptomatology on the PCL-5. Significant point-biserial correlation coefficients were found in 32% of comparisons. There were significant ($p < 0.05$) interactions between CPSS Global discrepancy scores and PCL-5 Global scores, Avoidance Subscale scores, and Alterations in Arousal and Reactivity Subscale scores. These results indicate that higher discrepancy scores were associated with higher Avoidance and Alterations in Arousal and Reactivity symptomatology in NOCs. The interactions between CPSS Alterations in Arousal and Reactivity discrepancy scores and PCL-5 Global and Subscale scores were significant ($p < 0.05$). Additional independent linear regression analyses were conducted to assess the extent to which discrepancy scores predicted NOCs' self-reports of their own STS symptomatology on the PCL-5. No significant results were found.

Table 10 depicts ANCOVAs used to test the predictive value of children's ages on the discrepancy scores between children's self-reports of their own PTSD symptomatology on the CPSS and NOCs' estimates of their children's PTSD symptomatology on the CPSS. Variance accounted for by the elapsed time between the children's disclosures of abuse and trauma assessments was controlled for in all analyses. Discrepancy scores in CPSS Global scores and all CPSS Subscale scores, aside from CPSS Avoidance, differed significantly ($p < 0.05$) between elementary school-aged children and middle school and high school-aged children.

Table 11 depicts ANCOVAs used to test the predictive value of children's genders on the discrepancy scores between children's self-reports of their own PTSD symptomatology on the CPSS and NOCs' estimates of their children's PTSD symptomatology on the CPSS. Variance accounted for by the elapsed time between the children's disclosures of abuse and trauma assessments was controlled for in all analyses. Discrepancy scores in CPSS Global scores and CPSS Intrusion Subscale scores differed significantly ($p < 0.05$) in male and female children.

Table 10 Children's Age Analyses of Covariance on Discrepancy Scores

	7 to 10			11 to 18			Age Significance	
CPSS Discrepancy Scores	*M*	*SE*	*N*	*M*	*SE*	*N*	*F*	n_{p2}
Global	-7.309	2.995	111	-16.262	2.289	111	5.614*	.049
Intrusion	-2.205	.894	111	-4.723	.684	111	4.981*	.044
Avoidance	-2.083	.541	111	-2.651	.414	111	.691	.006
Negative Alterations in Cognitions and Mood	-1.096	1.174	111	-4.572	.897	111	5.512*	.049
Alterations in Arousal and Reactivity	-1.917	1.092	111	-4.406	.835	111	3.262	.029

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

Table 11 Children's Gender Analyses of Covariance on CPSS Discrepancy Scores

	Male Children			Female Children			Gender Structure Significance	
CPSS Discrepancy Scores	*M*	*SE*	*N*	*M*	*SE*	*N*	*F*	n_{p2}
Global	-6.073	3.849	111	-14.955	2.075	111	4.126*	.037
Intrusion	-.973	1.126	111	-4.613	.607	111	8.089**	.070
Avoidance	-2.109	.693	111	-2.538	.373	111	.297	.003
Negative Alterations in Cognitions and Mood	-.665	1.509	111	-4.051	.814	111	3.889	.035
Alterations in Arousal and Reactivity	-2.325	1.409	111	-3.824	.760	111	.876	.008

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

Discussion

Data generated in this research adds to the growing body of literature suggesting that NOCs experience secondary traumatic stress (STS) following their children's disclosures of abuse— irrespective of the nature of the abuse and children's ages and genders (Lyon & Kouloumpos-Lenares, 1987; Sirles & Franke, 1989). Symptoms of Avoidance, Negative Alterations in Cognitions and Mood, and Alterations in Arousal and Reactivity were higher among NOCs who were in romantic relationships with the initiators of their children's abuse. NOCs' heightened distress may have manifested in Avoidance symptomatology on the PCL-5, specifically in hesitancy to seek social support in the aftermath of their children's disclosures of abuse. NOCs in this sample also appeared to have Negative Alterations in Cognitions and Mood symptomatology, namely indicating feeling guilt or shame when their children were abused by romantic partners. These feelings of guilt and shame may also explain NOCs' Avoidance symptomatology (i.e., NOCs may avoid reminders of the traumatic events because they want to avoid unwanted feelings of guilt and shame). Feelings of guilt may have also manifested in NOCs' Alterations in Arousal and Reactivity symptomatology. If NOCs experienced guilt for not initially protecting their children from their romantic partners, they may have been more effortful in protecting their children from possible future abuse (thus indicating hypervigilance on the PCL-5). Being in a romantic relationship with the initiator of abuse did not lead to significant Intrusion symptomatology in NOCs in this sample. This may be because NOCs in this sample were only exposed to their children's experiences through their children's explicit accounts of the abuse. NOCs' Intrusion symptomatology was better explained by their estimates of children's Alterations in Arousal and Reactivity symptomatology (i.e., observing these symptoms caused NOCs to re-experience disclosures of the traumatic events when they did not want to re-experience the disclosures of the traumatic events).

Negative Alterations in Cognitions and Mood symptomatology was significantly higher among NOCs with trauma histories incongruent with their children's trauma histories. This result supports findings in established literature suggesting that having a trauma history is an indicator of traumatic stress symptomatology even when individuals only experience a traumatic event vicariously (Marmar et al., 1996; Resick, 2000; Van der Kolk et al., 1996). Further, NOCs exposed to domestic violence may have experienced primary trauma symptoms associated with this exposure. These results support findings in established literature suggesting that individuals with trauma histories may find it difficult to adjust to a recent critical incident if they are having recurrent, distressing memories of past traumatic events (Adams et al., 2001; Brady et al., 1999; Pearlman & MacIan, 1995).

STS symptomatology was not elevated among the subset of NOCs who experienced abuse congruent with their children's experienced abuse. These results support findings in established literature suggesting that NOCs' responses to disclosures of abuse are not associated with their own childhood trauma histories (Deblinger et al., 1994; Heriot, 1996; Hubbard, 1989; Leifer et al., 2001; Salt et al., 1990).

The potential impact of elapsed time between children's disclosures of abuse and their trauma assessments was controlled for in all statistical analyses. Additional bivariate correlation coefficient calculations also showed that trauma symptomatology was more severe among both children and NOCs when there were shorter intervals between children's disclosures of abuse and their trauma assessments. Cognitive and mood-related trauma symptoms appeared to peak immediately after disclosures of abuse and subsided over time. The effect sizes of elapsed time were modest in statistical size. Elapsed times varied widely within the clinical sample. Factors that led to immediate as opposed to more delayed disclosures were not clearly identified.

Relationships between children's self-reports of their own PTSD symptomatology and NOCs' estimates of their children's PTSD symptomatology were not statistically significant for any criterion measures. These results contradict findings in established literature which suggest that NOCs' self-reported STS symptomatology is concordant with their children's PTSD symptomatology (Barakat et al., 1997; Daviss et al., 2000; De Vries et al., 1999; Hanson et al.,

1992; Kassam-Adams et al., 2006). NOCs' overall levels of STS and Intrusion, Avoidance, and Alterations in Arousal and Reactivity symptomatology, however, were significantly associated with their perceptions of their children's Alterations in Arousal and Reactivity PTSD symptomatology. These results support findings in established literature which suggest that NOCs' estimates of their children's PTSD symptomatology mirror their self-reported traumatic stress symptomatology (Valentino et al., 2010).

Discrepancy scores between NOCs' estimates of their children's Alterations in Arousal and Reactivity PTSD symptomatology and children's self-reports of their Alterations in Arousal and Reactivity PTSD symptomatology were significantly correlated with NOCs' self-reports of their own STS symptomatology. These results suggest that NOCs' reports of their own STS symptomatology more accurately mirror their perceptions of their children's PTSD symptomatology. NOCs may have perceived their children as more aroused and reactive, which may have led to higher overall levels of STS and Intrusion, Avoidance, and Alterations in Arousal and Reactivity symptomatology. These results likely stem from the nature of traumatic stress symptomatology. Intrusion, Avoidance, and Negative Alterations in Cognitions symptomatology are not always outwardly apparent. Negative Alterations in Mood symptomatology is often outwardly apparent, but was shown to subside over time in this clinical sample. Alterations in Arousal and Reactivity symptomatology is also outwardly apparent but was not affected by elapsed time in this clinical sample.

The discrepancy score between children's self-reports of their own PTSD symptomatology and NOCs' estimates of their children's PTSD symptomatology was also larger when children were male or between the ages of 7 and 10. Whether NOCs of male children or children between the ages of 7 and 10 greatly overestimated their children's PTSD symptomatology or whether these children showed less insight regarding their own PTSD symptomatology could not be firmly established from this data set.

Design Limitations and Future Directions

The data obtained in this research was based entirely on retrospective self-reports without verification of the accuracy of any recollections. The clinical sample in this research was also limited in size and restricted to sexual or physical abuse, while excluding poly-victimization. The results of this research may not generalize well to other clinical or more specialized populations that differ substantially in their composition. Clinical procedures did not provide opportunities to examine the quality of the NOC-child relationships or whether NOCs believed and supported their children.

Future research should extend analyses to many different forms of childhood maltreatment including emotional abuse, neglect, drug endangerment, exposure to domestic violence, and poly-victimization. Closer examination of the discrepancy score between children's self-reports of their own PTSD symptomatology and NOCs' estimates of children's PTSD symptomatology is warranted. Future studies should utilize z-scores to demonstrate how this discrepancy score is distributed among a larger sample. Closer examination is also warranted to the quality of the relationships between children and NOCs. Analyses should include assessments of NOCs' belief in the credibility of their children's disclosures of abuse in addition to NOCs' behavioral expressions of support for their children following these disclosures of abuse.

Clinical practitioners should note the discrepancy scores between children's self-reports of their own PTSD symptomatology and NOCs' estimates of their children's PTSD symptomatology. Clinical practitioners should also note the high correlation between NOCs' estimates of their children's PTSD symptomatology and NOCs' self-reports of their own STS symptomatology. These reports may often prove to be incongruent, and future research should be focused on discerning which data source is most accurate in trauma-informed treatment planning. When NOCs' estimates of their children's PTSD symptoms are congruent with their children's self-reports of their own PTSD symptoms, it may be optimal for NOCs with subclinical (<33) self-reported PCL-5 symptoms to participate in trauma-informed evidence-based treatments with their children (e.g., Trauma Focused Cognitive Behavioral Therapy, the Child and Family Traumatic Stress Intervention, or Parent Child Interaction Therapy). Should NOCs over-estimate their children's PTSD symptomatology or exceed the PCL-5 clinical cutoff score (>33), they may benefit from receiving individual sessions of a trauma-informed evidence-based treatment (e.g., Cognitive Processing Therapy or Prolonged Exposure Therapy). In all cases, clinical practitioners must rely on comprehensive measures, clinical observations, and clinical judgment when referring children and their NOCs for trauma-informed evidence-based treatments.

Declarations

Statement of Interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

References

Adams, K. B., Matto, H., & Harrington, D. (2001). The traumatic stress institute belief scale as a measure of vicarious trauma in a national sample of clinical social workers. *Families in Society, 82*, 363–371. https://doi.org/10.1606/1044-3894.178

Arzi, N. B., Solomon, Z., & Dekel, R. (2000). Secondary traumatization among wives of PTSD and post-concussion casualties: Distress, caregiver burden and psychological separation. *Brain Injury, 14*, 725–736.

Baird, K., & Kracen, A. C. (2006). Vicarious traumatization and secondary traumatic stress: A research synthesis. *Counselling Psychology Quarterly, 19*(2), 181–188. https://doi.org/10.1080/09515070600811899

Banyard, V. L., Rozelle, D., & Englund, D. W. (2001). Parenting the traumatized child: Attending to the needs of nonoffending caregivers of traumatized children. *Psychotherapy: Theory, Research, Practice, Training, 38*(1), 74–87. https://doi.org/10.1037/0033-3204.38.1.74

Barakat, L. P., Kazak, A. E., Meadows, A. T., Casey, R., Meeske, K., & Stuber, M. L. (1997). Families surviving childhood cancer: A comparison of posttraumatic stress symptoms with families of healthy children. *Journal of Pediatric Psychology, 22*, 843–859.

Barker-Collo, S., & Read, J. (2003). Models of response to childhood sexual abuse: Their implications for treatment. *Trauma, Violence, & Abuse, 4*(2), 95–111.

Blevins, C. A., Weathers, F. W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The posttraumatic stress disorder checklist for DSM-5 (PCL-5): Development and initial psychometric evaluation. *Journal of Traumatic Stress, 28*(6), 489–498. https://doi.org/10.1037/t51564-000

Brady, J., Guy, J., Poelstra, P., & Brokaw, B. (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. https://doi.org/10.1037/0735-7028.30.4.386

Bramsen, I., van der Ploeg, H. M., & Twisk, J. W. R. (2002). Secondary traumatization in Dutch couples of World War II survivors. *Journal of Consulting and Clinical Psychology, 70*, 241–245. https://doi.org/10.1037/0022-006X.70.1.241

Breslau, N. (2009). The epidemiology of trauma, PTSD, and other posttrauma disorders. *Trauma, Violence, & Abuse, 10*(3), 198–210.

Brewin, C., Andrews, B., & Valentine, B. (2000). Metaanalysis of risk factors for posttraumatic stress disorder in trauma exposed adults. *Journal of Consulting and Clinical Psychology, 68*, 748–766.

Corcoran, J. (2004). Treatment outcome research with the non-offending parents of sexually abused children: A critical review. *Journal of Child Sexual Abuse, 13*(2), 59–84. https://doi.org/10.1300/J070v13n02_04

Coughlan, K., & Parkin, C. (1987). Women partners of Vietnam vets. *Journal of Psychosocial Nursing, 25*, 25–27.

Daviss, W. B., Mooney, D., Racusin, R., Ford, J. D., Fleischer, A., & McHugo, G. J. (2000). Predicting posttraumatic stress after hospitalization for pediatric injury. *Journal of the American Academy of Child & Adolescent Psychiatry, 39*(5), 576–583.

Deblinger, E., Stauffer, L., & Landsberg, C. (1994). The impact of a history of child sexual abuse on maternal response to allegations of sexual abuse concerning her child. *Journal of Child Sexual Abuse, 3*(3), 67–75. https://doi.org/10.1300/J070v03n03_05

De Vries, A. P. J., Kassam-Adams, N., Cnaan, A., Sherman-Slate, E., Gallagher, P. R., & Winston, F. K. (1999). Looking beyond the physical injury: Posttraumatic stress disorder in children and parents after pediatric traffic injury. *Pediatrics, 104*, 1293–1299. https://doi.org/10.1542/peds.104.6.1293

Elliot, D., & Briere, J. (1994). *Epidemiology of memory and trauma*. In International Society on Traumatic Stress Studies Meeting.

Elliott, A. N., & Carnes, C. N. (2001). Reactions of nonoffending parents to the sexual abuse of their child: A review of the literature. *Child Maltreatment, 6*(4), 314–331. https://doi.org/10.1177/1077559501006004005

Ensel, W., & Lin, N. (1998). Age, the stress process, and physical distress: The role of distal stressors. *Journal of Aging and Health, 12*, 139–168. https://doi.org/10.1177/089826430001200201

Eriksson, C., Vande Kemp, H., Gorsuch, R., Hoke, S., & Foy, D. (2001). Trauma exposure and PTSD symptoms in international relief and development personnel. *Journal of Traumatic Stress, 13*, 205–211. https://doi.org/10.1023/A:1007804119319

Everson, M. D., Hunter, W. M., Runyon, D. K., Edelsohn, G. A., & Coulter, M. L. (1989). Maternal support following disclosure of incest. *American Journal of Orthopsychiatry, 59*(2), 197–207. https://doi.org/10.1111/j.1939-0025.1989.tb01651.x

Faller, K. C. (1984). Is the child victim of sexual abuse telling the truth? *Child Abuse & Neglect, 8*(4), 473–481.

Faller, K. C. (1988). *Child sexual abuse: An interdisciplinary manual for diagnosis, case management, and treatment*. Columbia University Press.

Foa, E. B., Asnaani, A., Zang, Y., Capaldi, S., & Yeh, R. (2018). Psychometrics of the Child PTSD Symptom Scale for DSM-5 for trauma-exposed children and adolescents. *Journal of Clinical Child & Adolescent Psychology, 47*(1), 38–46.

Foa, E. B., Johnson, K. M., Feeny, N. C., & Treadwell, K. R. (2001). The Child PTSD Symptom Scale: A preliminary examination of its psychometric properties. *Journal of Clinical Child Psychology, 30*(3), 376–384. https://doi.org/10.1207/S15374424JCCP3003_9

Goff, B. S. N., & Smith, D. B. (2005). Systemic traumatic stress: The couple adaptation to traumatic stress model. *Journal of Marital and Family Therapy, 31*(2), 145–157. https://doi.org/10.1111/j.1752-0606.2005.tb01552.x

Gomes-Schwartz, B., Horowitz, J. M., & Cardarelli, A. P. (1990). *Child sexual abuse: The initial effects*. Sage Publications, Inc.

Hanson, R. F., Saunders, B. E., & Lipovsky, J. A. (1992). The relationship between self-reported levels of distress of parents and victims in incest families. *Journal of Child Sexual Abuse, 1*(2), 49–60. https://doi.org/10.1300/J070v01n02_04

Heriot, J. (1996). Maternal protectiveness following the disclosure of intrafamilial child sexual abuse. *Journal of Interpersonal Violence, 11*(2), 181–194. https://doi.org/10.1177/088626096011002003

Hubbard, G. B. (1989). Mothers' perceptions of incest: Sustained disruption and turmoil. *Archives of Psychiatric Nursing*.

Jobe-Shields, L., Swiecicki, C. C., Fritz, D. R., Stinnette, J. S., & Hanson, R. F. (2016). Posttraumatic stress and depression in the nonoffending caregivers of sexually abused children: Associations with parenting practices. *Journal of Child Sexual Abuse, 25*(1), 110–125.

Kassam-Adams, N., Garcia-Espana, J. F., Miller, V. A., & Winston, F. (2006). Parent-child agreement regarding children's acute stress: The role of parent acute stress reactions. *Journal of the American Academy of Child & Adolescent Psychiatry, 45*(12), 1485–1493.

Knott, T., & Fabre, A. (2014). Maternal response to the disclosure of child sexual abuse: Systematic review and critical analysis of the literature. *Issues in Child Abuse Accusations, 20*(1), 1–6.

Kouyoumdjian, H., Perry, A. R., & Hansen, D. J. (2005). The role of adult expectations on the recovery of sexually abused children. *Aggression and Violent Behavior, 10*(4), 475–489.

Landolt, M. A., Vollrath, M., Ribi, K., Gnehm, H. E., & Sennhauser, F. H. (2003). Incidence and associations of parental and child posttraumatic stress symptoms in pediatric patients. *Journal of Child Psychology and Psychiatry, 44*(8), 1199–1207. https://doi.org/10.1111/1469-7610.00201

Lawson, L., & Chaffin, M. (1992). False negatives in sexual abuse disclosure interviews: Incidence and influence of caretaker's belief in abuse in cases of accidental abuse discovery by diagnosis of STD. *Journal of Interpersonal Violence, 7*(4), 532–542.

Leifer, M., Kilbane, T., & Grossman, G. (2001). A three-generational study comparing the families of supportive and unsupportive mothers of sexually abused children. *Child Maltreatment, 6*(4), 353–364. https://doi.org/10.1177/1077559501006004008

Lind, E. (2000). Secondary traumatic stress: predictors in psychologists. Dissertation Abstracts International: Section B: *The Sciences & Engineering*, 61, 5572. US: University Microfilms International.

Lipton, M. (1997). The effect of the primary caretaker's distress on the sexually abused child: A comparison of biological and foster parents. *Child and Adolescent Social Work Journal, 14*(2), 115–127.

Lovett, B. B. (2004). Child sexual abuse disclosure: Maternal response and other variables impacting the victim. *Child and Adolescent Social Work Journal, 21*(4), 355–371.

Lugris, V. (2000). Vicarious traumatization in therapists: Contributing factors, PTSD symptomatology, and cognitive distortions. Dissertation Abstracts International: Section B: The Sciences & Engineering, *61*, 5572. US: University Microfilms International.

Lyon, E., & Kouloumpos-Lenares, K. (1987). Clinician and state children's services worker collaboration in treating sexual abuse. *Child Welfare*, *66*(6).

Manion, I. G., McIntyre, J., Firestone, P., Ligezinska, M., Ensom, R., & Wells, G. (1996). Secondary traumatization in parents following the disclosure of extrafamilial child sexual abuse: Initial effects. *Child Abuse & Neglect, 20*(11), 1095–1109. https://doi.org/10.1016/0145-2134(96)00098-1

Marmar, C., Weiss, D., Metzler, T., & Delucchi, K. (1996). Characteristics of emergency services personnel related to peritraumatic dissociation during critical incident exposure. *American Journal of Psychiatry*, *153*(Suppl.), 94–102.

Myrick, A. C., & Green, E. J. (2013). A play-based treatment paradigm for nonoffending caretakers: Evidence-informed secondary trauma treatment. *International Journal of Play Therapy, 22*(4), 193. https://doi.org/10.1037/a0034560

Nelson, B. S., & Wright, D. W. (1996). Understanding and treating post-traumatic stress disorder symptoms in female partners of veterans with PTSD. *Journal of Marital and Family Therapy, 22*, 455–467. https://doi.org/10.1111/j.1752-0606.1996.tb00220.x

Pearlman, L. A., & MacIan, 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. https://doi.org/10.1037/0735-7028.26.6.558

Pierce, R. (2000). Secondary trauma from working with Vietnam veterans. Dissertation Abstracts International: Section B: The Sciences & Engineering, 61, 1653. US: University Microfilms International.

Pintello, D., & Zuravin, S. (2001). Intrafamilial child sexual abuse: Predictors of postdisclosure maternal belief and protective action. *Child Maltreatment, 6*(4), 344–352. https://doi.org/10.1177/1077559501006004007

Plummer, C. A. (2006). The discovery process: What mothers see and do in gaining awareness of the sexual abuse of their children. *Child Abuse & Neglect, 30*(11), 1227–1237.

Resick, P. (2000). *Stress and trauma*. Psychology Press. https://doi.org/10.4324/9781315820125

Runyon, M. K., Spandorfer, E. D., & Schroeder, C. M. (2014). Cognitions and distress in caregivers after their child's sexual abuse disclosure. *Journal of Child Sexual Abuse, 23*(2), 146–159.

Salt, P., Myer, M., Coleman, L., & Sauzier, M. (1990). The myth of the mother as "accomplice" to child sexual abuse. *Child sexual abuse: The initial effects*, 109–131.

Saywitz, K. J., Mannarino, A. P., Berliner, L., & Cohen, J. A. (2000). Treatment of sexually abused children and adolescents. *American Psychologist, 55*(9), 1040.

Shalev, A. Y., & Ursano, R. J. (2003). Mapping the multidimensional picture of acute responses to traumatic stress. *Reconstructing Early Intervention after Trauma, 118*, 129.

Sirles, E. A., & Franke, P. J. (1989). Factors influencing mothers' reactions to intrafamily sexual abuse. *Child Abuse & Neglect, 13*(1), 131–139. https://doi.org/10.1016/0145-2134(89)90036-7

Stewart, R. W., Ebesutani, C., Drescher, C. F., & Young, J. (2017). The child PTSD symptom scale: An investigation of its psychometric properties. *Journal of Interpersonal Violence, 32*(15), 2237–2256. https://doi.org/10.1177/0886260515596536

Trickett, P. K., Noll, J. G., & Putnam, F. W. (2011). The impact of sexual abuse on female development: Lessons from a multigenerational, longitudinal research study.

Valentino, K., Berkowitz, S., & Stover, C. S. (2010). Parenting behaviors and posttraumatic symptoms in relation to children's symptomatology following a traumatic event. *Journal of Traumatic Stress, 23*(3), 403–407.

Van der Kolk, B., McFarlane, A., & Weisaeth, L. (1996). *Traumatic stress: The effects of overwhelming experience on mind, body & society*. Guildford Press.

van Toledo, A., & Seymour, F. (2013). Interventions for caregivers of children who disclose sexual abuse: A review. *Clinical Psychology Review, 33*(6), 772–781. https://doi.org/10.1016/j.cpr.2013.05.006

Vogt, D. S., King, D. W., & King, L. A. (2007). Risk pathways for PTSD. *Handbook of PTSD: Science and practice*, 99–115.