Unterhitzenberger, Johanna; Sachser, Cedric; Rosner, Rita

Posttraumatic Stress Disorder and Childhood Traumatic Loss : A Secondary Analysis of Symptom Severity and Treatment Outcome

Primary publication

Unterhitzenberger, Johanna; Sachser, Cedric; Rosner, Rita (2020): Posttraumatic Stress Disorder and Childhood Traumatic Loss : A Secondary Analysis of Symptom Severity and Treatment Outcome, in: Journal of traumatic stress, Hoboken, NJ: Wiley, Vol. 33, No. 3, pp. 208–217, doi: 10.1002/jts.22499.

Journal of Traumatic Stress
June 2020, *33,* 208–217

ISTSS International Society for Traumatic Stress Studies

Posttraumatic Stress Disorder and Childhood Traumatic Loss: A Secondary Analysis of Symptom Severity and Treatment Outcome

Johanna Unterhitzenberger [1], Cedric Sachser [2] and Rita Rosner[1]
[1]Department of Psychology, Catholic University Eichstätt-Ingolstadt, Eichstätt, Germany
[2]Clinic for Child and Adolescent Psychiatry/Psychotherapy, Ulm University, Ulm, Germany

Loss is a commonly experienced traumatic event among children. Although the experience of loss can potentially lead to posttraumatic stress symptoms (PTSS), little is known about PTSS levels after traumatic loss versus other traumatic events. We investigated data from a randomized controlled trial (RCT) on trauma-focused cognitive behavioral therapy (TF–CBT) versus a waitlist condition for children with PTSS. In a secondary analysis, we compared participants who reported traumatic loss as their index event ($n = 23$) to those who reported the two most frequently reported index events in the RCT: sexual abuse (SA; $n = 59$) and physical violence (PV; $n = 55$). The index event was rated according to the participants' most distressing traumatic event reported on the Clinician-Administered PTSD Scale for Children and Adolescents. Participants who experienced traumatic loss reported fewer PTSS and better general functioning than those who reported SA. A subgroup RCT ($n = 19$) revealed TF–CBT to be highly effective in reducing PTSS in cases of traumatic loss, $d = 1.69$. The effect sizes for PTSS indicated that all three trauma groups benefted from TF–CBT. In the waitlist group, PTSS symptoms improved for SA and PV, $ds = 0.76$ and 0.98, respectively, but not for traumatic loss, $d = 0.23$. These fndings suggest that TF–CBT is a feasible and promising treatment for children who experience PTSS after traumatic loss. The results are limited by the post hoc quality of the analyses and lack of a measure of grief in the RCT.

More than 50 percent of young people experience traumatic events during childhood and adolescence (Landolt, Schnyder, Maier, Schoenbucher, & Mohler-Kuo, 2013; McLaughlin et al., 2013). Along with events such as accidents or physical and sexual abuse, the violent or sudden (i.e., caused by an accident) loss of a loved one is another potentially traumatic experience as defned by the criteria for posttraumatic stress disorder (PTSD) in the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*; American Psychiatric Association [APA], 2013). In children, even a loss that is not sudden, such as one that occurs after a loved one's long illness, can be viewed as traumatic (Cohen & Mannarino, 2011; Kaplow, Howell, & Layne, 2014). Consequently, the circumstances of the loss and the child's perception of the death as well as the impact on the child's life need to be taken into account when classifying a loss as traumatic (Kaplow, Layne, Pynoos, Cohen, & Lieberman, 2012). The experience of interpersonal loss in childhood has been described as a signifcant adverse life event (Kaplow, Saunders, Angold, & Costello, 2010) and a risk factor for mental health and social problems (Luecken, 2008).

Bereaved youths are often included in randomized controlled trials (RCTs) of PTSD treatment in children and adolescents (Cohen, Mannarino, & Iyengar, 2011; Gordon, Staples, Blyta, & Bytyqi, 2004; Jensen et al., 2014; Layne et al., 2008; McMullen et al., 2013). However, grief as an outcome is rarely studied (Layne et al., 2008). On one hand, these bereaved children may have been wrongly included in some PTSD trials due to the lack of reliable grief criteria and, consequently, a lack of appropriate assessment tools and treatments. On the other hand, these children may have participated in these trials because they actually suffered from PTSD after a traumatic experience involving the loss of a loved one. The inclusion of persistent complex bereavement disorder (PCBD) in the *DSM-5* (APA, 2013) as an "appendix disorder" has the potential to differentiate these two groups of bereaved children. In addition to the diagnostic criteria for PCBD, the *DSM-5* includes a traumatic bereavement specifer, which can potentially improve the distinction between trauma-related grief reactions and PTSD. In line with

The authors would like to express gratitude for the contributions the late Lutz Goldbeck made to this paper and for his efforts to implement evidence-based treatments for traumatized children and adolescents. The original randomized controlled trial was funded by the German Federal Ministry of Education and Research (01GY1141).

Correspondence concerning this article should be addressed to Johanna Unterhitzenberger, PhD, Catholic University Eichstätt-Ingolstadt, Department of Psychology, Ostenstrasse 25, 85071 Eichstätt, Germany. E-mail: johanna.unterhitzenberger@ku.de

DOI: 10.1002/jts.22499

this enhanced procedure, recommendations for developmentally adapted PCBD criteria (Kaplow et al., 2012) and their assessment (Kaplow et al., 2018) have been published. These steps forward will hopefully increase the likelihood that grief symptoms will be assessed when bereaved children present for PTSD treatment. Additionally, the inclusion of prolonged grief disorder as a new disorder (Killikelley & Maercker, 2018) in the 11th revision of the *International Classification of Diseases* (*ICD-11*) will potentially contribute to the improved identifca - tion and treatment of bereaved children with maladaptive grief reactions.

Many previous studies have examined the occurrence of posttraumatic stress symptoms (PTSS) in bereaved children (Brown et al., 2008; Goenjian et al., 2009; McClatchey & Vonk, 2005; Melhem, Moritz, Walker, Shear, & Brent, 2007). The fndings have indicated that maladaptive grief is independent from PTSD and depression (Melhem et al., 2004). However, high correlations between grief and PTSS or depression have been observed (Brown et al., 2008). In a recent pilot study, Grassetti and colleagues (2015) analyzed symptom levels and their trajectories in adolescents participating in trauma and grief component therapy for adolescents (TGCT-A; Layne, Saltzman, & Pynoos, 2002) with regard to their narrative focus (trauma vs. loss). The authors observed signifcantly higher levels of PTSS and depressive symptoms in youth who focused on trauma, whereas those who focused on grief showed more symptoms of a maladaptive grief reaction at intake. It is still not clear whether youth with PTSD and who report traumatic loss as their index event show lower pretreatment levels of PTSS compared to youth after other traumatic events. However, as events involving interpersonal trauma in general (Alisic et al., 2014) and sexual violence in particular (Kessler et al., 2017) have been documented as experiences that confer the highest conditional risk for PTSD, it can be assumed that there are types of traumatic exposure that make individuals more vulnerable to PTSS than traumatic losses.

Trauma-focused cognitive behavioral therapy (TF–CBT; Cohen, Mannarino, & Deblinger, 2017) is one of the most widely used and best researched treatments for pediatric PTSD. Cohen and Mannarino (2011) observed that PTSS and traumatic loss often co-occur in children and adolescents. They described this as childhood traumatic grief (CTG), which encompasses both constructs—PTSD and grief—and emphasizes their connectedness by means of a distinction between the disorders. In the CTG model, PTSS prevent children from resolving their grief, as the traumatic circumstances of the death prevent the child from thinking about positive memories of the deceased loved one (Cohen & Mannarino, 2011). Hence, PTSS support the avoidance of remembrance and, therefore, need to be addressed frst (e.g., by applying TF–CBT). Based on this definition, we herein refer to the co-occurrence of PTSS and a traumatic loss as "childhood traumatic loss." Several RCTs have reported the effcac y and effectiveness of TF–CBT in reducing PTSS in children and adolescents (for an overview, see Sachser, Rassenhofer, & Goldbeck, 2016). This therapy is recommended as frst line treatment in the current guidelines for childhood PTSD (National Institute for Health and Care Excellence, 2005; Phoenix Australia Centre for Posttraumatic Mental Health, 2013). The TF–CBT intervention offers additional grief modules for individuals with PTSS who have experienced traumatic loss, but they have only been tested in pilot studies (N = 22, Cohen, Mannarino, & Knudsen, 2004; N = 39, Cohen, Mannarino, & Staron, 2006). An open trial with orphaned children in Tanzania (N = 64) demonstrated the feasibility of a TF–CBT group approach including the grief modules (O'Donnell et al., 2014). To our knowledge, no data are available on the question whether children with PTSD who report traumatic loss as their index event beneft as much from TF–CBT as children who have experienced other traumatic events. Furthermore, no results on the effcac y of TF–CBT for PTSD following childhood traumatic loss in a randomized-controlled design have been published thus far.

In 2015, we completed a trial of TF–CBT for children and adolescents after various types of traumatic events (Goldbeck, Muche, Sachser, Tutus, & Rosner, 2016). In this RCT, we made the same omission as described earlier. We did not include a measure of childhood grief as a secondary outcome despite several participants who presented with a traumatic loss as the index event. The outcomes for PTSD in the RCT were as follows: large effect sizes for TF–CBT and waitlist groups, d = 1.51 and d = 0.88, respectively, and a moderate between-group effect size, d = 0.50 (Goldbeck et al., 2016). The event types reported most frequently as the index traumatic exposure were sexual abuse (SA) and physical violence (PV). Given the research gaps concerning childhood traumatic loss, as described earlier, the aim of the present study was to explore the impact of a traumatic loss on symptom levels and treatment outcome in an RCT for TF–CBT. We sought to compare participants with a traumatic loss to children and adolescents after the two most frequently reported index events in the RCT (i.e., SA and PV). We hypothesized that (a) levels of PTSS and depression would be higher in the SA and PV groups compared to traumatic loss group and (b) participants who had experienced traumatic loss would report improvement in their PTSS after TF–CBT (subgroup RCT: TF–CBT vs. waitlist). In an exploratory manner, we compared (c) other psychological symptom levels at baseline (i.e., anxiety, internalizing and externalizing symptoms, quality of life, self- and caregiver report when available) and (d) the pre–post symptom level development across participants categorized by the index event (traumatic loss, SA, or PV) for TF–CBT and waitlist, respectively.

Method

Participants

The present sample consisted of children and adolescents treated in a multicenter RCT evaluating TF–CBT for children and adolescents with PTSD (Goldbeck et al., 2016). Participants, who were assessed at baseline (N = 159), met the following main inclusion criteria of the RCT: aged between 7 and

17 years; experience of a traumatic event after 2 years of age and at least 3 months before assessment; a PTSS symptom score of 35 or higher on the Clinician Administered PTSD Scale for Children and Adolescents (CAPS-CA; Nader, Kriegler, Blake, & Pynoos, 1994), with at least one symptom present from each symptom cluster (i.e., reexperiencing, avoidance, hyperarousal) according to the fourth edition of the *DSM* (DSM-IV; APA, 2000); PTSD as the main disorder (in the case of comorbid diagnoses); cooperation of at least one nonoffending caregiver; and safe living conditions (i.e., offender not living with child anymore). Exclusion criteria were acute suicidal behavior, severe traumatic brain injury, pervasive developmental disorder or psychosis, psychopharmacological medication started or changed up to 6 weeks before frst assessment, current psychotherapeutic treatment, severe mental disorder of the main caregiver, or previous participation of a sibling in the RCT.

For the present study, we analyzed 139 participants: children and adolescents who reported traumatic loss ($n = 23$; 14.5% of total study sample), SA ($n = 59$; 37.1%), or PV ($n = 55$; 34.6%) as their index trauma. We used the CAPS-CA (Nader et al., 1994) to identify participants' index event by asking each youth which of the listed events they had reported they considered to be the most distressing at the time of the assessment. We chose SA and PV as comparison groups as they comprised the two biggest trauma exposure categories within the RCT. The remaining 20 participants reported several different index events, such as accidents and war experiences; these participants were therefore excluded from the study due to diffculties in defning another comparison group. Participants in our sample had a mean age of 12.84 years ($SD = 2.80$), 73.0% ($n = 100$) were female, and 90.5% ($n = 124$) were born in Germany. About one-ffth of participants (21.9%, $n = 30$) were foster children. Consequently, 26.3% ($n = 36$) of caregivers were foster parents or professional caregivers (i.e., individuals working in youth welfare facilities).

Procedure

Participant recruitment for the original RCT took place between February 2012 and January 2015 in eight study centers in Germany. Participants were either referred to the child and adolescent mental health clinics by health care professionals or youth welfare institutions or they applied themselves after hearing about the study through various advertising channels. Participants in the original RCT were randomly allocated to either TF–CBT ($n = 76$) or a waitlist control condition ($n = 83$). Within the traumatic loss group, randomization resulted in nine cases treated with TF–CBT and 14 cases allocated to waitlist. Participants in the TF–CBT group were reassessed within 4 months posttreatment; treatment consisted of 12 sessions, each of which was 90–100 min length. Children and adolescents in the waitlist control group were reassessed 4 months after randomization and were offered TF–CBT at this time (Goldbeck et al., 2016). The study was approved by the review board at the Ulm University.

The TF–CBT (Cohen et al., 2017) protocol includes nine components subsumed within the PRACTICE acronym: psychoeducation and parenting skills, relaxation, affective modulation, cognitive processing (PRAC), trauma narrative and cognitive processing II (T), in vivo exposure, conjoint child/caregiver session, and enhancing safety and future skills (ICE). Therapists cover parenting skills and gradual exposure continuously from the onset of therapy. Usually, TF–CBT involves 12 sessions with the child and the caregiver; each session lasts approximately 90 min. The PRAC, T, and ICE parts each account for about one-third of therapy (i.e., 4–5 sessions).

The TF–CBT manual offers grief-specifc components relevant to a traumatic event involving death and loss. These include psychoeducation on grief, grieving the loss, resolving ambivalent feelings, redefning the relationship (from interaction to memory), and committing to present relationships. Each of these components builds systematically on the PRACTICE skills and can be tailored to meet the unique circumstances of children and adolescents. In the RCT, all participants received 12 sessions of TF–CBT. For cases in which a traumatic loss was the reported index event, the grief-specifc components were integrated into the PRACTICE modules from the beginning of therapy; for example, in Session 1, in addition to psychoeducation on PTSD, participants received psychoeducation on reactions following a loss and the nature of the loss (e.g., suicide, lengthy illness). Consequently, all participants described in the present study attended the same number of therapy sessions. All TF–CBT sessions were videotaped to allow for monitoring of treatment adherence. Additionally, each therapist's frst case was fully monitored and given a session-by-session video adherence rating. After that, 25% of all sessions were randomly chosen and rated. Overall adherence was 96% in all sessions (Goldbeck et al., 2016).

Measures

As the original RCT started in February 2012, all measures refer to the criteria and/or symptoms according *to DSM-IV* (APA, 2000).

Index traumatic event, PTSS, and PTSD diagnosis. We used the German version (Steil & Füchsel, 2006) of the CAPS-CA (Nader et al., 1994) to identify the index event and establish PTSD diagnoses and PTSS severity. The CAPS-CA, the gold standard interview for PTSD in children and adolescents, comprises a traumatic event checklist and an interview that assesses the frequency and intensity of PTSS. The German version has demonstrated good internal consistency (Cronbach's $\alpha = .91$; Steil & Füchsel, 2006). For the present study, the CAPS-CA was administered by trained and blinded raters. In a frst step, participants were asked whether they had experienced traumatic events as described in the event checklist, to which they responded with one of the following options: *happened to me, witnessed it, learned about it, not sure,* or *doesn't apply*. If they reported more than one event, the participants were then asked to name the most distressing event. In a second step, this event

was explored in more depth ("What happened at that time?", "How old were you?", "Did somebody get hurt/die?"). In a third step, PTSS were assessed with regard to the index event, using 17 items that were rated on a 5-point Likert scale ranging from 0 (*never*) to 4 (*daily or almost daily*) for frequency as well as from 0 (*none*) to 4 (*extreme*) for intensity. The possible range of total scores is between 0 and 136. A symptom was deemed to be evident if the frequency score was at least 1 and the intensity score at least 2. In the present sample, Cronbach's alpha was .79.

Global functioning. The Children's Global Assessment Scale (CGAS; Shaffer et al., 1983) was used to rate the participants' global functioning. The CGAS score can range from 0 to 100, with higher scores indicating better functioning. The scale has demonstrated good interrater and test–retest reliability (Shaffer et al., 1983). For the present study, the CGAS was administered by trained and blinded raters.

Depression. We assessed symptoms of depression using the German version (Stiensmeier-Pelster, Schürmann, & Duda, 2000) of the self-report Children's Depression Inventory (CDI; Kovacs, 1985). Participants are asked to rate their mood with respect to 26 items, each comprising three statements, that are coded as 0, 1, or 2. According to the norm table, a total score of 18 or higher is deemed to be critical. In the present sample, the CDI showed good reliability, Cronbach's $\alpha = .89$.

Anxiety. The Screen for Child Anxiety-Related Emotional Disorders (SCARED; Birmaher et al., 1999) is a 41-item self-report measure for children and adolescents aged between 8 and 18 years. Symptoms of separation anxiety, panic disorder, generalized anxiety disorder, and school refusal are rated on a 3-point Likert scale ranging from 0 (*not true*) to 2 (*very true*). A total score of 25 or higher indicates a probable anxiety disorder. Reliability in the present study was good, Cronbach's $\alpha = .92$. In addition to participants' self-report assessments, caregivers completed the SCARED as a proxy report of children's anxiety symptoms.

Quality of life. Participants' quality of life was assessed using the Inventory of Quality of Life in Children (ILK; Mattejat & Remschmidt, 2006) both via self-report and caregiver report. The measure asks respondents to rate several domains of life using a 5-point Likert scale with higher scores indicating poorer quality of life. In the present sample, internal consistency was satisfactory, Cronbach's $\alpha = .86$.

Child behavior. Caregivers completed the Child Behavior Checklist for children aged 4–18 years (CBCL/4–18; Achenbach, 1991) in order to rate a wide range of participant symptoms. Responses are rated using a 3-point Likert scale ranging from 0 (*never*) to 2 (*often*). A total score and separate scores for internalizing and externalizing behaviors can be computed. In the present sample, reliability was good, Cronbach's αs = .86–.94.

Data Analysis

For all analyses, we used SPSS (Version 25) for Windows. We replaced missing values in item scores with the respondent's mean value for the other items of the respective scale if fewer than 25% of the values were missing (Goldbeck et al., 2016). All analyses were completer analyses. The sample ($N = 137$) was divided according to the index event (i.e., traumatic loss, SA, or PV). A post hoc power analysis revealed that our sample size would allow us to observe moderate effects (i.e., $d = 0.50$) with a statistical power of .90 if we tested for group differences across three subgroups with an analysis of variance (ANOVA) and a two-tailed alpha level of .05.

We computed ANOVAs and chi-square tests to compare the three groups in terms of sample characteristics and psychological outcomes at pretreatment, using Tukey post hoc analyses in the event of signifcant differences. Given the exploratory nature of the analyses, the signifcance level was not adjusted. We conducted repeated-measures ANOVAs and calculated effect sizes (Cohen's *d*) to examine the effectiveness of the traumatic loss subgroup with regard to the primary outcome (i.e., PTSS). On an individual level, we used the critical change derived from the formula of the reliable change index (RCI; Jacobson & Truax, 1991), which uses the Cronbach's alpha value of the measure (CAPS-CA) to estimate the clinical signifcance of the primary outcome in treated individuals. According to the RCI formula, a clinically meaningful change was defned as 14 points or higher on the CAPS-CA. To compare the three groups in the randomized condition at posttreatment, we analyzed levels of PTSS and depressive symptoms descriptively for each group and computed pre–post effect sizes (Cohen's *d*).

Results

Sample Characteristics

As the descriptive characteristics in Table 1 indicate, most participants who reported a traumatic loss as their index event had suffered from the bereavement of a loved one that resulted from an illness or an accident, followed by loss due to a sudden death, homicide, or suicide. The majority of participants had lost a parent (61.9%; $n = 13$), and about one-third of the sample had either witnessed the situation during which the person died or had seen the body of the deceased at a time other than the funeral. The degree of detail in the assessment of the index event depended on the age of the participant. An 8-year-old boy, for example, described his index event as "My daddy made my mummy dead," whereas a 16-year-old girl said "When I was 8 years old, my mother died suddenly from a heart attack during the night. The day before we had a huge fght." Some reports were more detailed, such as that from a 16-year-old girl who said "My sister died last year. I do not know why she died; my family does not talk about it. Two weeks after she died a psychologist told me about it. However, I knew before that something had happened."

Table 1
Types of Loss, Relationship to the Deceased, and Witness of Death or Dead Body

Details of Loss	*n*	%
Type of loss[a]		
Illness	5	23.8
Accident	5	23.8
Homicide	4	19.0
Sudden death	4	19.0
Suicide	3	14.3
Relationship to deceased[a]		
Mother	7	31.8
Father	6	27.3
Sibling	4	18.2
Best friend	3	13.6
Grandparent	1	4.5
Aunt	1	4.5
Witness[b]	7	30.4

Note. [a]$N = 21$.[b]$N = 23$.

We analyzed the number of participants in the SA and PV subgroups who indicated that they experienced the loss of a close person by answering Item 15 (i.e., *death of someone close to you*) on the CAPS-CA event checklist in the affrmati ve (i.e., *happened to me*, *witnessed it*, or *learned about it*). This resulted in 29 (49.2%) bereaved participants in the SA group and 27 (49.1%) in the PV group. Descriptive and baseline data for all trauma groups are given in Table 2. Although participants in the three groups did not differ in terms of age, there was a signifcant difference in terms of gender; however, post hoc analyses did not reveal any signifcant gender-specifc results.

Comparison of Baseline Symptom Levels

There were no differences in self-reported depressive and anxiety symptoms or self- or proxy-reported quality of life at baseline. However, PTSS and global functioning differed signifcantly . The Tukey post hoc analysis revealed a signif - cant difference, with lower CAPS-CA scores in the traumatic loss group compared to the SA group, $p = .048$, Tukey post hoc test = -9.88, 95% CI [-19.70, -0.05]; whereas ratings of global functioning were signifcantly higher for the traumatic loss group than for the SA group, $p = .023$, Tukey post hoc test = 7.42, 95% CI [0.85, 13.89]. In addition, caregivers of youths in the SA group reported that participants were signifcantly more anxious, $p = .023$, Tukey post hoc test = 8.81, 95% CI [1.16, 16.46], and had more internalizing problems, $p = .020$, Tukey post hoc test = 5.88, 95% CI [0.65, 11.11], compared to caregiver reports for the traumatic loss group.

Treatment Outcomes

The RCT subgroup of completers was used to analyze treatment outcomes. The overall dropout rate in this study was 15.1% ($n = 21$), with 17.4% of dropouts coming from the traumatic loss group ($n = 4$), 16.9% from the SA group ($n = 10$), and 12.7% from the PV group ($n = 7$). In the traumatic loss group, two participants dropped out of each treatment condition (i.e., TF–CBT and waitlist). In the subgroup of completer

Table 2
Baseline Descriptive Characteristics and Test Statistics for Age, Gender, and Psychological Symptoms

	Sexual Abuse			Physical Violence			Traumatic Loss			Statistical Analysis		
Outcome	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*df*	*F*	χ^2
Age (years)	59	12.71	2.66	55	12.91	2.95	23	13.00	2.86	2, 134	0.12	
CAPS–CA	59	61.75	17.76	55	56.82	15.30	23	51.87	18.02	2, 134	3.12*	
CDI	59	21.78	8.64	55	18.95	10.24	23	19.09	9.53	2, 134	1.47	
SCARED–self	59	35.00	15.31	53	31.45	15.45	23	27.13	15.65	2, 132	2.28	
SCARED–caregiver	58	27.81	14.14	49	24.59	13.01	23	19.00	10.15	2, 127	3.77*	
ILK–self	58	61.56	16.07	52	61.30	14.95	22	62.58	20.11	2, 134	0.50	
ILK–caregiver	58	57.70	14.42	47	60.16	12.97	23	61.53	9.41	2, 129	0.86	
CBCL/4–18 internalizing	59	22.07	9.55	52	18.88	8.03	21	16.19	7.51	2, 129	4.12*	
CBCL/4–18 externalizing	59	18.51	13.17	52	17.73	13.97	21	13.81	8.74	2, 129	1.04	
CGAS	58	54.95	11.04	49	58.02	10.47	22	62.36	12.33	2, 126	3.72*	
Total	*n*	*n*	%	*n*	*n*	%	*n*	*n*	%			
Female participants	59	50	84.7	55	34	61.8	23	16	69.6	2		7.76*

Note. CAPS-CA = Clinician Administered PTSD Scale for Children and Adolescents; CDI = Children's Depression Inventory; SCARED = Screen for Child Anxiety-Related Emotional Disorders, ILK = Inventory to Assess Life Quality in Children and Adolescents; CBCL/4–18 = Child Behavior Checklist for Ages 4–18; CGAS = Children's Global Assessment Scale.
*$p < .05$.

Table 3
Descriptive Characteristics and Effect Sizes for Posttraumatic Stress and Depressive Symptoms for Completers, by Group

	TF–CBT						Waitlist					
	CAPS-CA			CDI			CAPS-CA			CDI		
Trauma group	*M*	*SD*	*d*	*M*	*SD*	*d*	*M*	*SD*	*d*	*M*	*SD*	*d*
Sexual abuse[a]			1.51			0.84			0.76			0.13
T1	61.76	16.22		19.67	8.32		61.17	17.73		22.52	8.03	
T2	30.40	24.51		12.63	8.38		45.25	23.92		21.30	10.84	
Physical violence[b]			1.42			0.73			0.98			0.37
T1	57.65	18.29		16.91	10.63		56.08	11.98		20.88	9.71	
T2	27.22	24.13		10.32	7.04		37.36	24.27		17.16	10.59	
Traumatic loss[c]			1.90			0.32			0.23			0.18
T1	52.43	17.82		14.71	7.30		50.58	16.94		21.67	11.11	
T2	16.86	19.52		11.00	14.60		45.17	28.75		19.58	12.23	

Note. TF–CBT = trauma-focused cognitive behavioral therapy; CAPS-CA = Clinician Administered PTSD Scale for Children and Adolescents; CDI = Children's Depression Inventory; T1 = Time 1 (baseline); T2 = Time 2 (follow-up).
[a]TF–CBT: $n = 25$, waitlist: $n = 24$; [b]TF–CBT: $n = 23$, waitlist: $n = 25$; [c]TF–CBT: $n = 7$, waitlist: $n = 12$.

traumatic loss cases ($n = 19$), the repeated measures ANOVA comparing TF–CBT with waitlist showed a signifcant reduction in PTSS, $F(1, 17) = 13.46$, $p = .002$. The between-group effect size was very large, $d = 1.69$. The majority (85.7%, $n = 6$) of treated cases did not meet *DSM-IV* criteria for PTSD posttreatment. We observed a clinically meaningful change in CAPS-CA score in fv e out of seven treated cases (71.4%). We did not detect a clinically meaningful deterioration in any of the treated traumatic loss cases.

To examine the development of symptom levels from baseline to follow-up, we have presented the results for the TF–CBT and waitlist groups separately in Table 3. As shown, the effect sizes for PTSS symptom reduction in TF–CBT were large in all three subgroups. There was no signifcant group difference for PTSS, $F(2, 52) = 0.88$, $p = .419$ at follow-up between our subgroups in TF–CBT. In the waitlist group, effect sizes for PTSS reduction were small for participants after a traumatic loss, whereas reductions after SA and PV showed large effect sizes. Accordingly, PTSS in the three subgroups no longer differed signifcantly at follow-up in the waitlist group, $F(2, 58) = 0.73$, $p = .488$. Regarding depressive symptoms, effect sizes were small for the traumatic loss group in TF–CBT and for all three subgroups in the waitlist condition and large for the SA and PV group after treatment.

Discussion

In this exploratory secondary analysis, we studied TF–CBT versus waitlist for children enrolled in an RCT who had experienced traumatic losses. We analyzed their levels of psychological symptoms and treatment outcomes in comparison to participants who reported other index events (i.e., SA or PV). As predicted, after a traumatic loss, children reported lower levels of PTSS than the comparison groups. Contrary to our hypothesis, we did not detect differences in self-reported depressive symptoms. Furthermore, we found higher levels of clinician-rated global functioning in the traumatic loss group. Caregivers reported lower levels of anxiety and internalizing symptoms in children in the traumatic loss group compared to caregiver reports for the SA group. A subgroup RCT (TF–CBT vs. waitlist) for PTSS after traumatic loss showed a signif - cant effect for the treatment and a high between-group effect size. This is in line with our second hypothesis, which was that participants in the loss subgroup would improve after receiving TF–CBT. The comparison of symptom change trajectories indicated a decline in PTSS after TF–CBT for all groups regardless of the index event. In the waitlist condition, however, participants in the traumatic loss group did not improve according to the effect size, whereas participants with SA- and PV-related PTSD showed improvement in their levels of PTSS while on the waitlist.

Half of the participants in the two comparison groups reported being bereaved according to the endorsement of this item in the CAPS-CA life events checklist. Although this is a high number, given that 22.4% of a representative Swiss sample reported having heard of a serious injury or violent death of a close one (Landolt et al., 2013), it is clear that children and adolescents have a high risk of being confronted with the death of a loved one. When interpreting the high number of losses in the comparison groups, it is important to keep in mind that participants could have reported the death of a grandparent, schoolmate, or any relative—additional information that was not assessed on the CAPS-CA unless it was the index event. Furthermore, except for cases in which traumatic loss was reported as the index event, we do not know about the impact the losses had on participants, as symptoms of PTSD were assessed

with regard to the index event in the interview and not to all experienced events.

A closer look at the characteristics of the losses described in this sample reveals several risk factors for various mental health complaints, such as the loss of a parent (i.e., kinship; Brown et al., 2008), traumatic or sudden death (i.e., type of loss; Brent, Melham, Donnohoe, & Walker, 2009), or witnessing the death or the dead body (Melhem, Walker, Moritz, & Brent, 2008). In particular, the latter two factors can be defned as traumatic experiences and may explain why these youths found their way into an RCT for PTSD. We believe that these losses can be characterized as traumatic due to their characteristics and the levels of PTSS in our bereaved participants. There is evidence suggesting that the conditional probability for PTSD diagnosis in youth is highest after interpersonal violence (Landolt et al., 2013; McLaughlin et al., 2013). However, there is a lack of data analyzing the severity of PTSS in youths affected by interpersonal violence in comparison to other traumatic events, thus making it diffcult to collate our fndings. Nevertheless, our results point in the same direction as those reported by Grassetti and colleagues (2015), where participants who focused their narrative on trauma reported signifcantly more PTSS than those who focused on grief. Of course, the narrative focus in the therapy and the index event reported in the assessment are rarely comparable. However, the trend is the same. A young patient who felt most distressed by an interpersonal violent traumatic event will likely display higher levels of PTSS than a patient who was most distressed by the loss of a loved one, as seen in our study. A patient who focuses on a certain traumatic event in the trauma narrative will do so because they feel impaired by the symptoms related to this experience (Grassetti et al., 2015). The strength of the study by Grassetti et al. lies in the fact that, in addition to PTSS, the authors measured symptoms of maladaptive grief. This was not done in our study and constitutes a major limitation regarding the interpretation of our results.

Caregiver reports indicated that participants' internalizing symptom levels were higher for children with PTSD after SA than after a traumatic loss. This is in accordance with the pilot study mentioned earlier in which youth whose narratives had a trauma focus recorded signifcantly higher depressive scores than youth with a grief focus (Grassetti et al., 2015). However, we did not detect those differences regarding self-reported depressive symptoms. Caregiver-reported internalizing symptomatology is to be interpreted with caution as cross-informant agreement is often low (e.g., Hicks White, & Snyder, 2018). As the CBCL internalizing scale used in the present study includes inter alia items on anxiety, this difference could be due to the higher anxiety symptoms caregivers also reported on the SCARED. The differences allow interpretations in different directions. On one hand, the expectation might be that PTSD after SA is related more closely to anxiety, as trauma reminders trigger emotions like fear or panic—reactions that might be less prominent in situations of loss. On the other hand, children who have experienced a traumatic loss might suffer from a higher level of separation anxiety and, therefore, display high levels of anxiety symptoms. Given that we analyzed a clinically referred sample from a psychotherapeutic RCT and that the sample sizes in the subgroup analyses were small, we emphasize that our results regarding differences in the pretreatment symptom levels are not representative.

In the original RCT, pre–post effect sizes were large (Goldbeck et al., 2016), and, in the present study, we observed the same trend in all three subgroups after TF–CBT. In addition, the waitlist effect sizes were large in the original study (Goldbeck et al., 2016). In our subgroup analyses, this was confrmed for the SA and PV groups, but, in contrast, the loss group yielded only small effect sizes while on the waitlist. It is possible that repeated PTSS assessments for waitlist participants are comparable to repeated exposure, decreasing avoidance and, therefore, PTSS. Boddez (2018) refers to Solomon and Corbit (1974) when he connects the behavior of bereaved persons after a long-lasting relationship to craving that is "fairly resistant to extinction treatment" (Boddez, 2018, p. 25). Consequently, we can assume that grief likely does not habituate in the same manner as anxiety, and PTSS after a traumatic loss might be more closely associated with grief. The trajectories of grief reactions differ from individual to individual (Melhem, Porta, Shamseddeen, Walker Payne, & Brent, 2011). This is why the long-term monitoring of children after traumatic losses seems particularly necessary. Furthermore, although the expectation of receiving evidence-based treatment can cause hope and improve symptoms in some participants, this effect may be less pronounced for bereaved individuals as the actual loss remains evident while they await treatment.

When they were offered TF–CBT, however, participants in the traumatic loss group improved comparably to children in the other trauma groups even though they started with lower levels of PTSS. The overall dropout rate in our sample of approximately 15% was the same as in the original RCT (Goldbeck et al., 2016), and dropouts were spread evenly over the three subgroups. However, participants who had experienced traumatic loss were not randomized evenly to TF–CBT or waitlist (i.e., more youth in this group were assigned the waitlist condition) nor in terms of depressive symptom scores. Had these both occurred in a more balanced fashion, the results might have been signifcant for depressive symptoms as well. The subgroup RCT with traumatic loss cases displayed higher effect sizes than those found in the original RCT (Goldbeck et al., 2016). The small sample size and the completer analysis are to be kept in mind when interpreting the effect size. Nonetheless, this was the frst evaluation of the effcac y of TF–CBT for children after traumatic loss in a small but controlled manner, and it confrms the positive fndings from TF–CBT for CTG pilot studies (Cohen et al., 2004, 2006). This small-scale RCT provides initial evidence that trauma-focused psychotherapy can be effective in reducing PTSS in children who suffer from exposure to traumatic losses. As noted earlier, bereaved children are often found in PTSD trials. It seems noteworthy that for this population, modularized treatment approaches

that allow for combined treatment for trauma exposure and grief exist, such as TF–CBT for CTG (Cohen et al., 2017) or TGCT-A (Layne et al., 2002), which can add to a PTSD-only treatment.

This study had a number of limitations. First, we conducted a secondary analysis with subgroups according to their reported index event. The mean number of traumatic event types reported in the RCT was six (Goldbeck et al., 2016). Therefore, we cannot assume that we analyzed distinct groups with respect to trauma, and we found some overlap in the trauma groups concerning loss experiences. But this seems to be a standard problem encountered in trauma research with children and adolescents. A number of traumatized youth present with multiple traumatic experiences (e.g., Diehle, Opmeer, Boer, Mannarino, & Lindauer, 2015; Landolt et al., 2013), especially in a clinically referred sample such as the one we analyzed. Consequently, we need to assess an index event in order to choose a path for trauma confrontation. We believe that this limitation could constitute a strength for our study as well. We observed signifcant differences in symptom levels and trajectories between the groups despite an overlap in traumatic experiences. This increases the ecological validity of our fndings; after all, the impact of a certain traumatic event is a very individual reaction and the ensuing reactions depend on several factors, such as previous traumatic experiences, gender, or social support (Trickey, Siddaway, Meiser-Stedman, Serpell, & Field, 2012). Hence, the subjective judgment of an index event seems appropriate rather than an objective of the "worst" experience or whether a loss was traumatic. Second, the traumatic loss group was considerably smaller than the other two groups, thus reducing the validity of our results. Furthermore, the group was not evenly distributed to TF–CBT and waitlist conditions. Third, we analyzed data from a clinically referred sample included in an RCT, which are far from being representative. The overall sample size and the modest statistical power add to the caveat that results should be interpreted cautiously. Fourth, the longitudinal data for children after loss were reported for a very small subsample only. Symptom changes were interpreted descriptively based on effect sizes. Therefore, caution needs to be exercised when drawing any conclusions. Finally, we can only provide information about children with PTSD after traumatic losses but not about their grief symptoms as no grief measure was applied in the original RCT. We believe that this is a major limitation of our study. However, with new measures being validated for children and adolescents (e.g., Kaplow et al., 2018), future trials for traumatized children should be able to include screening for maladaptive grief symptoms, as the odds are high that bereaved participants will fnd their way into PTSD treatments.

This exploratory secondary analysis revealed some interesting preliminary fndings on the psychological symptom levels of children with PTSD after traumatic losses, on the effectiveness of TF–CBT for these participants, and on participant symptom development. Symptoms of posttraumatic stress are only one aspect of possible reactions in bereaved children; however, they are not rare. More research is needed to fully understand when and why certain traumatic experiences are estimated as index events in the light of a history of multiple trauma types. In addition, research on possible differences in symptom severity and treatment outcome of different trauma groups, especially in light of already evaluated treatment approaches like TF–CBT, are necessary.

References

Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4–18 and 1991 profile*. Burlington, VT: Department of Psychiatry, University of Vermont.

Alisic, E., Zalta, A. K., van Wesel, F., Larsen, S. E., Hafstad, G. S., Hassanpour, K., & Smid, G. E. (2014). Rates of posttraumatic stress disorder in trauma-exposed children and adolescents: Meta-analysis. *The British Journal of Psychiatry*, *204*, 335–340.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.

Birmaher, B., Brent, D. A., Chiappetta, L., Bridge, J., Monga, S., & Baugher, M. (1999). Psychometric properties of the Screen for Child Anxiety-Related Emotional Disorders (SCARED): A replication study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *38*, 1230–1236. https://doi.org/10.1097/00004583-199910000-00011

Boddez, Y. (2018). The presence of your absence: A conditioning theory of grief. *Behavior Research and Therapy*, *106*, 18–27. https://doi.org/10.1016/j.brat.2018.04.006

Brent, D., Melhem, N., Donnohoe, M. B., & Walker, M. (2009). The incidence and course of depression in bereaved youth 21 months after the loss of a parent to suicide, accident, or sudden natural death. *American Journal of Psychiatry*, *66*, 786–794. https://doi.org/10.1176/appi.ajp.2009.08081244

Brown, E. J., Amaya-Jackson, L., Cohen, J., Handel, S., Thiel De Bocanegra, H., Zatta, E., … Mannarino, A. (2008). Childhood traumatic grief: A multisite empirical examination of the construct and its correlates. *Death Studies*, *32*, 899–923. https://doi.org/10.1080/07481180802440209

Cohen, J. A., & Mannarino, A. P. (2011). Supporting children with traumatic grief: What educators need to know. *School Psychology International*, *32*, 117–131. https://doi.org/10.1177/0143034311400827

Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2017). *Treating trauma and traumatic grief in children and adolescents* (2nd ed.). New York, NY: Guilford Press.

Cohen, J. A., Mannarino, A. P., & Iyengar, S. (2011). Community treatment of posttraumatic stress disorder for children exposed to intimate partner violence a randomized controlled trial. *Archives of Pediatrics & Adolescent Medicine*, *165*, 16–21. https://doi.org/10.1001/archpediatrics.2010.247

Cohen, J. A., Mannarino, A. P., & Knudsen, K. (2004). Treating childhood traumatic grief: A pilot study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *43*, 1225–1233. https://doi.org/10.1097/01.chi.0000135620.15522.38

Cohen, J. A., Mannarino, A. P., & Steron, V. (2006). Modifed cognitive behavioral therapy for childhood traumatic grief (CBT–CTG): A pilot study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *45*, 1465–73. https://doi.org/10.1097/01.chi.0000237705.43260.2c

Diehle, J., Opmeer, B. C., Boer, F., Mannarino, A. P., & Lindauer, R. J. (2015). Trauma-focused cognitive behavioral therapy or eye movement

desensitization and reprocessing: what works in children with posttraumatic stress symptoms? A randomized controlled trial. *European Child and Adolescent Psychiatry*, *24*, 227–236. https://doi.org/10.1007/s00787-014-0572-5

Goenjian, A. K., Walling, D., Steinberg, A. M., Roussos, A., Goenjian, H. A., & Pynoos, R. S. (2009). Depression and PTSD symptoms among bereaved adolescents 6 1/2 years after the 1988 Spitak earthquake. *Journal of Affective Disorders*, *112*, 81–84. https://doi.org/10.1016/j.jad.2008.04.006

Goldbeck, L., Muche, R., Sachser, C., Tutus, D., & Rosner, R. (2016). Effectiveness of trauma-focused cognitive behavioral therapy for children and adolescents: A randomized controlled trial in eight German mental health clinics. *Psychotherapy and Psychosomatics*, *85*, 159–170. https://doi.org/10.1159/000442824

Gordon, J. S., Staples, J. K., Blyta, A., & Bytyqi, M. (2004). Treatment of posttraumatic stress disorder in postwar Kosovo high school students using mind-body skills groups: A pilot study. *Journal of Traumatic Stress*, *17*, 143–147. https://doi.org/10.1023/B:JOTS.0000022620.13209.a0

Grassetti, S. N., Herres, J., Williamson, A. A., Yarger H. A., Layne, C. M., & Kobak, R. (2015). Narrative focus predicts symptom change trajectories in group treatment for traumatized and bereaved adolescents. *Journal of Clinical Child and Adolescent Psychology*, *44*, 933–941. https://doi.org/10.1080/15374416.2014.913249

Hicks White, A. A. & Snyder, A. (2018). Examining youth and caregiver reports of depression and anxiety in families seeking eating disorder treatment. *Eating Disorders*, *26*, 326–342. https://doi.org/10.1080/10640266.2017.1405650

Jacobson, N. S., & Truax, P. (1991). Clinical signifcance: A statistical approach to defning meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology*, *59*, 12–19. https://doi.org/10.1037//0022-006x.59.1.12

Jensen, T. K., Holt, T., Ormhaug, S. M., Egeland, K., Granly, L., Hoaas, L. C., … Wentzel-Larsen, T. (2014). A randomized effectiveness study comparing trauma-focused cognitive behavioral therapy with therapy as usual for youth. *Journal of Clinical Child and Adolescent Psychology*, *43*, 356–369. https://doi.org/10.1080/15374416.2013.822307

Kaplow, J. B., Howell, K. H., & Layne, C. M. (2014). Do circumstances of the death matter? Identifying socioenvironmental risks for grief-related psychopathology in bereaved youth. *Journal of Traumatic Stress*, *27*, 42–49. https://doi.org/10.1002/jts.21877

Kaplow, J. B., Layne, C. M., Oosterhoff, B., Goldenthal, H., Howell, K. H., Wamser-Nanney, R., … Pynoos, R. (2018). Validation of the Persistent Complex Bereavement Disorder (PCBD) Checklist: A developmentally informed assessment tool for bereaved youth. *Journal of Traumatic Stress*, *31*, 244–254. https://doi.org/10.1002/jts.22277

Kaplow, J. B., Layne, C. M., Pynoos, R. S., Cohen, J. A., & Liebermann, A. (2012). *DSM-5* diagnostic criteria for bereavement-related disorders in children and adolescents: Developmental considerations. *Psychiatry*, *75*, 243–265. https://doi.org/10.1521/psyc.2012.75.3.243

Kaplow, J. B., Saunders, J., Angold, A., & Costello, E. J. (2010). Psychiatric symptoms in bereaved versus nonbereaved youth and young adults: A longitudinal epidemiological study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *49*, 1145–54. https://doi.org/10.1016/j.jaac.2010.08.004

Kessler, R. C., Aguilar-Gaxiola, S., Alonso, J., Benjet, C., Bromet, E. J., Cardoso, G., … Koenen, K. C. (2017). Trauma and PTSD in the WHO World Mental Health Surveys. *European Journal of Psychotraumatology*, *8*(sup5). https://doi.org/10.1080/20008198.2017.1353383

Killikelly, C., & Maercker, A. (2018). Prolonged grief disorder for *ICD-11*: The primacy of clinical utility and international applicability. *European Journal of Psychotraumatology*, *8*, 1476441. https://doi.org/10.1080/20008198.2018.1476441

Kovacs, M. (1985). The Children's Depression Inventory (CDI). *Psychopharmacological Bulletin*, *21*, 995–998.

Landolt, M., Schnyder, U., Maier, T., Schoenbucher, V., & Mohler-Kuo, M. (2013). Trauma exposure and posttraumatic stress disorder in adolescents: A national survey in Switzerland. *Journal of Traumatic Stress*, *26*, 209–216. https://doi.org/10.1002/jts.21794

Layne, C. M., Saltzman, W. R., Poppleton, L., Burlingame, G. M., Pašalić, A., Duraković, E. … Pynoos, R. S. (2008). Effectiveness of a school-based group psychotherapy program for war-exposed adolescents: A randomized controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, *47*, 1048–1062. https://doi.org/10.1097/CHI.0b013e31817eecae

Layne, C. M., Saltzman, W. R., & Pynoos, R. S. (2002). *Trauma and grief component therapy for adolescents (TGCT–A) manual*. Los Angeles, CA: University of California, Los Angeles.

Luecken, L. J. (2008). Long-term consequences of parental death in childhood: Psychological and physiological manifestations. In M. S. Stroebe, R. O. Hansson, H. Schut, & W. Stroebe (Eds.), *Handbook of bereavement research and practice* (pp. 397–416). Washington, DC: American Psychological Association.

Mattejat, F., & Remschmidt, H. (2006). *Inventar zur Erfassung der Lebensqualität bei Kindern und Jugendlichen (ILK)* [Inventory to assess quality of life in children and adolescents]. Göttingen, Germany: Hogrefe.

McClatchey, R. S., & Vonk, M. E. (2005). An exploratory study of posttraumatic stress disorder symptoms among bereaved children. *Omega Journal of Death and Dying*, *51*, 285–300. https://doi.org/10.2190/EA87-LDJN-LULB-VNVU

McLaughlin, K. A., Koenen, K. C., Hill, E. D., Petukhova, M., Sampson, N. A., Zaslavsky, A. M. & Kessler, R. C. (2013). Trauma exposure and posttraumatic stress disorder in a national sample of adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, *52*, 815–813. https://doi.org/10.1016/j.jaac.2013.05.011

McMullen, J., O'Callaghan, P., Shannon, C., Black, A., & Eakin, J. (2013). Group trauma-focused cognitive-behavioural therapy with former child soldiers and other war-affected boys in the DR Congo: A randomised controlled trial. *Journal of Child Psychology and Psychiatry*, *54*, 1231–1241. https://doi.org/10.1111/jcpp.12094

Melhem, N. M., Day, N., Shear, M. K., Day, R., Reynolds, C. F., III, & Brent, D. (2004). Traumatic grief among adolescents exposed to a peer's suicide. *American Journal of Psychiatry*, *161*, 1411–1416. https://doi.org/10.1176/appi.ajp.161.8.1411

Melhem, N. M., Moritz, G., Walker, M., Shear, M. K., & Brent D. (2007). Phenomenology and correlates of complicated grief in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, *46*, 493–499. https://doi.org/10.1097/chi.0b013e31803062a9

Melhem, N. M., Porta, G., Shamseddeen, W., Walker Payne, M., & Brent, D. (2011). Grief in children bereaved by sudden parental death. *Archives of General Psychiatry*, *68*, 911–919. https://doi.org/10.1001/archgenpsychiatry.2011.101

Melhem, N. M., Walker, M., Moritz, G., & Brent, D. (2008). Antecedents and sequelae of sudden parental death in offspring and surviving caregiver. *Archives of Pediatric and Adolescent Medicine*, *162*, 403–410. https://doi.org/10.1001/archpedi.162.5.403

Nader, K. O., Kriegler, J. A., Blake, D. D., & Pynoos, R. S. (1994). *Clinical Administered PTSD Scale, Child and Adolescent Version (CAPS-CA)*. White River Junction, VT: National Center for PTSD.

National Institute for Health and Care Excellence. (2005). *The management of PTSD in adults and children in primary and secondary care*. Retrieved from https://www.nice.org.uk/guidance/cg26/resources

O'Donnell, K., Dorsey, S., Gong, W., Ostermann, J., Whetten, R., Cohen, J., . . . Whetten, K. (2014). Treating maladaptive grief and posttraumatic stress symptoms in orphaned children in Tanzania: Group-based trauma-focused cognitive-behavioral therapy. *Journal of Traumatic Stress*, *27*, 664–671. https://doi.org/10.1002/jts.21970

Phoenix Australia Centre for Posttraumatic Mental Health. (2013). *Australian guidelines for the treatment of acute stress disorder and posttraumatic stress disorder in children and adolescents*. Retrieved from http://phoenixaustralia.org/resources/ptsd-guidelines

Sachser, C., Rassenhofer, M., & Goldbeck, L. (2016). Traumafokussierte kognitive Verhaltenstherapie mit Kindern und Jugendlichen—Klinisches Vorgehen, Evidenzbasis und weitere Perspektiven [Trauma-focused cognitive behavioral therapy with children and adolescents: Practice, evidence base, and future directions]. *Zeitschrift für Kinder- und Jugendpsychiatrie und Psychotherapie*, *44*, 1–11. https://doi.org/10.1024/1422-4917/a000436

Shaffer, D., Gould, M. S., Brasic, J., Ambrosini, P., Fisher, P., Bird, H., & Aluwahlia, S. (1983). A Children's Global Assessment Scale (CGAS). *Archives of General Psychiatry*, *40*, 1228–1231. https://doi.org/10.1001/archpsyc.1983.01790100074010

Solomon, R. L., & Corbit, J. D. (1974). An opponent-process theory of motivation: I. Temporal dynamics of affect. *Psychological Review*, *81*, 119–145. https://doi.org/10.1037/h0036128

Steil, R., & Füchsel, G. (2006). *Interviews zu Belastungsstörungen bei Kindern und Jugendlichen (IBS-KJ)* [Interviews for stress-related disorders in children and adolescents]. Göttingen, Germany: Hogrefe.

Stiensmeier-Pelster, J., Schürmann, M., & Duda, K. (2000). *Depressionsinventar für Kinder und Jugendliche (DIKJ)* [Depression Inventory for Children and Adolescents]. Göttingen, Germany: Hogrefe.

Trickey, D., Siddaway, A. P., Meiser-Stedman, Serpell, L. & Field, A. P. (2012). A meta-analysis of risk factors for post-traumatic stress disorder in children and adolescents. *Clinical Psychology Review*, *32*, 122–138. https://doi.org/10.1016/j.cpr.2011.12.001