



Evidence-Based Practice in Child and Adolescent Mental Health

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/uebh20

The Effectiveness of Child-Parent Psychotherapy on Traumatized Preschoolers and Their Caregivers: A Swedish Multi-Site Study

Anna Norlén, Charlotte Bäckman, Agneta Thorén & Kjerstin Almqvist

To cite this article: Anna Norlén, Charlotte Bäckman, Agneta Thorén & Kjerstin Almqvist (24 Jun 2024): The Effectiveness of Child-Parent Psychotherapy on Traumatized Preschoolers and Their Caregivers: A Swedish Multi-Site Study, Evidence-Based Practice in Child and Adolescent Mental Health, DOI: [10.1080/23794925.2024.2358486](https://doi.org/10.1080/23794925.2024.2358486)

To link to this article: <https://doi.org/10.1080/23794925.2024.2358486>



© 2024 The Author(s). Published with license by Taylor & Francis Group, LLC.



Published online: 24 Jun 2024.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)

The Effectiveness of Child-Parent Psychotherapy on Traumatized Preschoolers and Their Caregivers: A Swedish Multi-Site Study

Anna Norlén ^a, Charlotte Bäckman ^a, Agneta Thorén ^b, and Kjerstin Almqvist ^a

^aDepartment of Social and Psychological Studies, Karlstad University, Karlstad, Sweden; ^bThe Erica Foundation, The Erica Foundation Sweden, Stockholm, Sweden

ABSTRACT

Introduction: Trauma affects a child's mental health and appears to be associated with challenges in caregiver-child dynamics. Nearly half of child trauma victims are under the age of six, yet few interventions are designed for this age group. Child-Parent Psychotherapy (CPP) is an attachment-based trauma treatment for preschool-aged victims of adversities and their caregivers. This study examines the effectiveness of CPP when implemented in a Swedish naturalistic multi-site clinical setting. **Method:** 57 children (age 2–6 years) with potentially traumatic experiences and their caregivers participated. They were recruited from 12 mental health services providing child treatment. The study has a one-group, pretest-posttest design. Outcome measures covered post-traumatic stress and general psychological symptoms in children and caregivers and caregivers' perceptions of their relationship with their child. Paired *t*-tests were used to calculate within-group differences. Effect sizes were computed as Cohen's *d* and associations between child and caregiver outcomes as Pearson's correlation coefficient (*r*). A hierarchical regression analysis was tested to explore the correlation analysis. **Results:** Reductions in posttraumatic stress and general psychological symptoms with small-to-medium effect sizes were found in children and caregivers. Caregivers reported perceived improvements in their relationship with their child, with associations to findings in child posttraumatic stress reduction. **Discussion:** Findings support earlier results that CPP may be a suitable choice of treatment for preschoolers exposed to potentially traumatic events, such as violence. The dyadic treatment model seems to address the association between child traumatic stress and caregivers' perceptions of the caregiving relationship. Further dissemination testing is suggested.

Introduction

Being subjected or exposed to potential traumatic events such as Intimate Partner Violence (IPV), child abuse, or other severe stressors in early childhood can profoundly affect immediate and long-term development and well-being. A presumed complex interaction between experiences, environment and individual differences underpins psychological development following childhood trauma (McCrary et al., 2012). Exposure to childhood trauma is associated with several negative psychological outcomes, including posttraumatic stress disorder (PTSD) and other trauma-related symptoms such as behavior problems, anxiety, and depression (Hunt et al., 2017).

For a child to develop posttraumatic symptoms, exposure to a potential traumatic event is necessary

but not sufficient. Hence, the role of other factors explaining the development of symptoms has been studied, for example, age. It has been suggested that younger children are more vulnerable to traumatic exposure and show stronger associations with the development of psychopathology compared to exposure at an older age (Lippard & Nemeroff, 2020; Woolgar et al., 2021). However, studies examining the relationship between trauma exposure and subsequent effects on preschool-aged children have yielded inconsistent findings. It remains unclear whether developmental and age-related factors act as risk or protection (Salmon & Bryant, 2002). Poor family functioning and parental trauma-related distress have shown to be risk factors for the development of trauma symptoms in children (Fong et al., 2019; Trickey et al., 2012). However, research on

CONTACT Anna Norlén  anna.norlen@ericastiftelsen.se  Department of Social and Psychological Studies, Karlstad University, Universitetsgatan 2, 651 88 Karlstad, Sweden

© 2024 The Author(s). Published with license by Taylor & Francis Group, LLC.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

associations between parenting behavior and child posttraumatic stress reactions has presented mixed findings. Child symptoms can evoke dysfunctional parenting and vice versa (Williamson et al., 2017). From the perspective of attachment, studies on infants and toddlers have contributed to the understanding of how childhood trauma including caregivers may negatively affect the young child. Disorganized attachment is associated with less positive outcomes in child development, an increased risk for behavior problems (Fearon et al., 2010; Thompson, 2016), and an increased risk for post-traumatic symptoms if the child is exposed (McDonald et al., 2008). Disorganized attachment has been shown to be more frequent in children exposed to potential trauma such as IPV, child abuse, and neglect (Forslund et al., 2021).

Children in foster care are at increased risk for attachment disorders due to common experiences of inadequate caregiving and exposure to several potentially traumatic events. Their opportunity to form a stable attachment to nurturing caregivers early in life has been severely limited. Even in foster care, children often must cope with unsafety associated with placement, such as unpredictability and failed visitations with birth parents. A high prevalence of mental and physical health concerns has been reported in children in foster care, imposing serious challenges to foster parents and care stability. The importance of detailed attachment- and trauma-informed guidance to foster caregivers has been stressed (Szilagyi et al., 2015).

There is a lack of research on psychotherapeutic interventions for children in foster care. Several challenges to conduct high-quality research with the target group have been identified, e.g., the complexity of defining well-being of children in foster care, practical difficulties in accessing participants and gaining consent for participation in research from biological parents and/or social workers, leading to the fact that these children rarely are included in studies (Heptinstall, 2000; Mezey et al., 2015). As their needs are characterized by heterogeneity, adaptations of psychotherapeutic interventions are crucial, e.g., with respect to attachment issues due to common changes in placement and that many children are under the age of five (Midgley et al., 2019). It has been proposed that therapeutic interventions need to be flexible,

trauma-specific and incorporate developmental needs. Moreover, adaptations with concern to the involvement of birth parents and/or foster caregivers as to possible reunification goals might be needed (Weiner et al., 2009).

Parental participation in trauma treatment of preschool-aged children has been underscored, based on the child's dependency on caregivers for protection and emotional regulation and the importance of the relational context following traumatic events (Gutermann et al., 2016; Landolt et al., 2017).

Trauma-focused psychotherapy for preschool-aged children

Nearly half of the maltreatment victims are under the age of six, yet mental health providers are rarely trained in evidence-based trauma-focused treatment methods for these young children (Smith et al., 2020). Maltreated children with insecure attachments are at high risk for developing behavior problems (Fearon et al., 2010). Thus, it has been stated that interventions for maltreated young children should evaluate both attachment and behavioral functioning (Stronach et al., 2013). Consequently, also foster parents should be closely involved in child treatment.

Most trauma-focused treatment methods are designed for school-aged children. Effectiveness studies of trauma-focused methods lack ample data concerning children under the age of five and more research on the treatment of younger children is recommended, as this population seems to benefit less from existing interventions (Gutermann et al., 2016). However, some outlines for the necessary core components in effective treatment for preschoolers have been presented (Landolt et al., 2017). Successful treatments targeting preschoolers need to be relational, flexible, and sensitive to developmental issues. Further, including caregivers is central to the understanding of the child's symptoms and the improvement of relational quality (Gutermann et al., 2016; Toth & Manly, 2019). Models to provide parental involvement in trauma-focused child treatment have developed from different theoretical platforms. Research from an attachment perspective underscores that interventions need to target multiple

parental and child factors, as well as the relationship (Fong et al., 2019). Joint sessions to process traumatic experiences are suggested to restore the child's experiences of relational safety (Chu et al., 2021). Helping caregivers develop more sensitive parenting strategies, has shown to decrease children's disorganized attachment symptoms (Bakermans-Kranenburg et al., 2005; Facompré et al., 2018).

Trauma-focused therapy methods for children and parents with a cognitive-behavioral (CBT) approach typically offer psychoeducation, communication- and stress-management skills, while joint child-parent sessions to process traumatic experiences are rare (McGuire et al., 2021). The efficacy of CBT-oriented methods for preschool-aged children is unclear, but available results seem to support that treatment mainly decrease symptoms of PTSD, and to some extent internalizing and externalizing problems (Cohen & Mannarino, 1996; De Roos et al., 2017; Deblinger et al., 2001; Eslinger et al., 2014; Jouriles et al., 2009; Salloum et al., 2016; Scheeringa et al., 2011). Caregiver-child attachment relationship is not focused in these methods and thus have not been evaluated.

Child - Parent Psychotherapy (CPP; A. Lieberman & Van Horn, 2005; A. Lieberman et al., 2015) is an attachment-based and trauma-focused method that presumes the child-parent relationship as an effective vehicle to promote healthy development in children affected by potential trauma and is supported in several randomized controlled trials (RCT); (Chu et al., 2021).

Child-parent psychotherapy (CPP)

CPP is one of the few treatment methods developed and evaluated for traumatized children below 6 years of age. The method is theoretically based on attachment and psychodynamic theory and integrates elements from developmental psychology, trauma theory, cognitive behavioral, and social learning theories. Therapeutic interventions aim to promote mutual affect regulation in the child-caregiver relationship and to change maladjusted behaviors and interactions. The treatment targets caregivers' and children's maladaptive representations of themselves, their relationship, and contextual factors.

CPP was originally developed for children exposed to IPV and comprised 50 weekly one-hour sessions (A. Lieberman & Van Horn, 2005). The method has been modified into a flexible phase-oriented design tailored to individual needs. Sessions ranging from 20 weeks and above are suggested; however, treatment can also be briefer (A. Lieberman et al., 2015). The average number of weekly one-hour sessions in prior studies were 32.09 (Ghosh Ippen et al., 2011; A. F. Lieberman et al., 2005, 2006), 21.56 (Cicchetti et al., 2006) and 45.24 (Toth et al., 2006). The main therapeutic tools are dyadic trauma-focused and regulating play activities. For a thorough description of this method see A. Lieberman et al. (2015).

Recent reviews and meta-analysis found positive effects for CPP regarding improved attachment security and decreased attachment insecurity and disorganization, as well as decrease in PTSD symptoms and positive changes in child wellbeing. Further research was recommended due to the limited number of studies, small numbers of participants and lack of long term follow-ups (Mavranouzouli et al., 2020; Slead et al., 2023).

A. F. Lieberman et al. (2005), found that children receiving CPP showed greater reductions in post-traumatic stress symptoms than a comparison group ($d = 0.63$) and the proportion of children receiving a PTSD diagnosis decreased from 50% to 6% at the time for post intervention. Significant reductions in general behavior problems were also found ($d = 0.24$). The biological mothers taking part of the treatment showed significant reductions in PTSD avoidance symptoms ($d = 0.50$). A six-month follow-up showed the durability of reductions in child general behavior problems ($d = 0.41$) and mother general distress symptoms ($d = 0.38$, A. F. Lieberman et al., 2006). Children exposed to four or more traumatic events benefited the most, with significant decreases in both PTSD diagnosis (from 60,9% to 0% at post-intervention, $d = 1.79$) (Ghosh Ippen et al., 2011).

Cicchetti et al. (2006) conducted a study of maltreated children receiving CPP together with their biological mothers, showing that the children's rate of secure attachment changed from 3,1% before treatment to 60,7% after the intervention. The signs of disorganized attachment decreased from

85,5% to 32,1%. A one-year follow-up revealed sustained attachment improvements in children receiving CPP which was not shown for the comparison groups (Stronach et al., 2013). A study of children with depressed mothers showed significant improved attachment security (from 16,7% to 67,4% post treatment) and decreased disorganized attachment (from 37,9 to 10,9% post treatment) (Toth et al., 2006).

Dissemination of CPP outside the USA

Challenges associated with organizational and structural issues arise when adopting therapeutic methods from one cultural context and disseminating them into another. This is especially true for treatments designed for aspects of parenting, as these are closely associated with culture, values, and legislation (Bowen et al., 2009; Hasson et al., 2014). Small feasibility studies are recommended before extended implementation of methods as adaptation may be necessary to maintain their effectiveness (Hasson et al., 2014). The dissemination of CPP outside the USA is so far sparse, with some feasibility studies showing promising results (David & Schiff, 2015; Hooker et al., 2019, 2022). In Sweden, a feasibility study showed good acceptance of CPP among therapists and caregivers and positive tendencies for children's psychological well-being and functioning (Almqvist et al., 2018; Broberg et al., 2015). Caregivers reported appreciation of the dyadic approach in CPP and experienced positive development regarding child well-being, own caregiving capacities, and the caregiver-child relationship (Norlén et al., 2021). The results revealed no need for cultural adaptations and proposed subsequent exploration of the effectiveness of CPP in a naturalistic clinical practice setting.

When disseminating a treatment method in a new context, it is further recommended to investigate the sustainability of effectiveness in the clinical setting targeted, as it has been argued that evidence-based methods often diminish in effect when adopted. A potential need to tailor interventions to complex clinical settings, where patients often represent a heterogeneous sample with multiple problems, might be indicated (Weisz et al., 2011). A naturalistic design is

assumed to strengthen the contribution of clinical practice to the development of the method (Beidas & Kendall, 2014).

Aim and research questions

The present study aimed to evaluate the effectiveness of the intervention in a sample of preschool-aged children undergoing CPP together with their caregiver in naturalistic clinical settings, and thereby add to the existing dissemination research on CPP in Sweden.

The following research questions were addressed:

- What is the effectiveness of CPP on general psychological health and posttraumatic stress symptoms in children 0–6 years old when CPP is implemented in the Swedish naturalistic clinical context?
- What is the effectiveness of CPP on general psychological health, posttraumatic stress symptoms, and perceptions of the relationship with their child, among caregivers participating in the treatment?

Method

Study design

This study is a one-group, pre-post design study in a naturalistic multi-site setting. It explores the outcomes and effectiveness of CPP when provided by regular staff in twelve general child and adolescent mental health services (CAMHS) and one non-governmental organization (NGO) that offer treatment for trauma-exposed children among other interventions. The services involved in the study followed their ordinary routines for referral and assessment of children. The varying local routines consistently included anamnestic data, developmental and trauma history, and symptoms inventory. This resulted in a diverse sample of children included in the study, referred by caregivers, child protection services, child health-care centers, or other agencies. Once the initial assessment determined that CPP treatment was plausible, a detailed assessment of trauma exposure and trauma-related symptoms was conducted to further clarify the

needs of the child (i.e., *foundational phase* as a component of CPP).

Inclusion criteria for the children were: i) ages 1–6 at the start of therapy; ii) exposure to at least one potentially traumatic event (the equivalent of Criteria A for posttraumatic stress disorder according to Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood: DC 0–5; Zero to Three, 2016) and showing psychiatric symptoms assessed as related to these experiences; and iii) being recommended specialized psychotherapeutic treatment after the clinical assessment. The inclusion criteria for caregivers, including biological and foster parents, were that they were the non-offending parent, responsible for the daily care of the child, able to participate in the treatment, and able to fill in the questionnaires without support from a professional interpreter. Exclusion criteria were if the child showed no clinical need for trauma-focused treatment or if a juridical custodian did not consent to treatment.

Participants

The sample comprised 57 children, of which 46 lived with at least one biological parent and 11 in foster care. The children (20 girls and 36 boys, one child with gender not indicated) were 2–6 years old at the start of the CPP-therapy ($M = 4.7$, $SD = 1.2$), and the majority were 4–5 years old ($n = 34$), 14 children were 2–3 years old, and nine children were 6 years old. The caregivers ($n = 57$) comprised 43 biological mothers, 3 biological fathers, and 11 foster parents (mothers).

Procedure

Services with CPP-certified therapists, or with therapist in ongoing CPP-training, were contacted by the researchers and asked to participate in the study. A total number of 33 therapists from 12 regular services in urban and rural areas of Sweden were included. Each therapist collected data from 1 to 3 CPP-therapies. All treatments were covered by the Swedish health and welfare system. Regular CPP-fidelity checks were used by the therapist to promote adherence to the method. The CPP fidelity check packet is a supplement in the treatment manual (A. Lieberman et al., 2015). Therapists were instructed to complete fidelity forms after each session covering the

14 CPP treatment objectives, e.g., promote emotional reciprocity, and strengthen dyadic affect regulation capacities. Evaluations of to what extent each of the CPP-objectives had been targeted during the session were rated on a four-grade scale (from *not at all* to a *high degree*). Further, to what degree the dyad seemed able to receive the interventions was evaluated on a six-grade scale (from *not at all* to *completely*). All therapists were supervised every second week in online method consultations by the CPP-originators or certified Swedish CPP trainers.

Due to funding, data were collected in two time periods. The first time period (2013–2015) comprised data on 20 children and their caregivers. In the second time period (2017–2021), data on 37 children and their caregivers were collected. All data was collected by means of questionnaires (see Measures below) and assessed by the caregivers due to the age of the children. Because of the two separate time periods of data collection, different measures were used for some variables, even though similar information was collected. In the first period of data collection, only children exposed to IPV were included, the *Young Child PTSD Checklist* (YCPC) was used for assessing posttraumatic symptoms in children, and the *Life Incident of Traumatic Event* (LITE) was used for assessing exposure to potential traumatic events in caregivers. For the second period of data collection, more extensive instruments were used to collect this information. Thus, it was possible to analyze YCPC and LITE from both subsamples as the data from the more extensive measures in the second period could be used to complete these measures.

Referral and assessment

The therapists at the agencies informed and asked the eligible caregivers for consent of participation. Caregivers were assured that participation in the study was voluntary and could be interrupted at any time without affecting treatment. After oral and written information about the study, written consent was obtained from the custodians. In cases where the parents were separated but had joint custody, both parents were informed and asked for consent. For children in foster care, the juridical custodians were asked for consent for the child to participate,

and written consent was obtained from the participating foster parent. When possible, the child was orally informed of the study and asked for oral consent. The caregiver filled in the questionnaires at the time of therapy start (T1) and after 20 dyadic sessions or less if the therapy were closed earlier (T2). The session limit for T2 was based on the average number of sessions in previous CPP-studies and after personal communication with the CPP originators. The number of dyadic sessions at T2 ranged from 7 to 20. The treatment was concluded when the therapist deemed the child properly treated, in alignment with individual clinical needs and CPP guidelines.

Attrition and missing data

A maximum of 20% missing items was tolerated, either for the item or the respondent (Downey & King, 1998). In cases with <20% missing items, values at T2 were completed with the previously stated value, that is last-observation-carried-forward (LOCF). Missing data due to non-responses were considered randomly distributed. The dropout rate from pre- to post assessment was 16%. Test analyses were carried out both on completers and on the intention-to-treat analysis with LOCF. No significant differences were found between the two types of datasets ($p \leq .05$), and only analyses based on LOCF are presented to keep the sample size and power throughout the study.

Measures

The study employed several instruments to assess exposure to potential traumatic events in both the child and caregiver (one for the child and two for the caregiver), psychological symptoms in both the child and caregiver (two for each), and caregiving capacities (two).

Exposure to potential traumatic events in children and caregivers

The Violence against the Child (VMB) assesses the child's exposure to violence (Almqvist & Broberg, 2004; Broberg et al., 2015). The questionnaire consists of 14 items regarding physical violence (eight items, e.g., hit in the face, kick, push, or constraint),

psychological violence (four items, e.g., verbal threat, offense, or violation), sexual abuse (one item) and other violence or violation (one item). All items are answered on a 7-point Likert scale ranging from 0 ("never happened") to 6 ("happened every week"). The VMB generates a total score, ranging from 0 to 84.

The Violence within the Family (VIF) screens for exposure to IPV and other types of violence between adults (Broberg et al., 2015). The questionnaire consists of four items, one screening for exposure to physical violence, two on psychological violence, and one on a person from earlier relationship still causing unsafety. Two items are answered on a 4-point Likert scale ranging from 0 ("no, never happened") to 3 ("yes, happened this year"), and two items are scored as 0 (yes) or 1 (no). High scores indicate a more recent occurrence of the violence. The VIF generates a total score, ranging from 0 to 7.

The Life Incident of Traumatic Event (LITE), a screening instrument for life-time exposure of traumatic events, was used for the caregivers (Greenwald & Rubin, 1999). The questionnaire consists of 16 items screening for various types of potentially traumatic scored as occurrence (1) or not (0). LITE can be divided into two subscales: non-interpersonal events (eight items, e.g., exposure to accidents, fire, natural disasters) and interpersonal events (seven items, e.g., exposure to hit, threat, sexual abuse). One additional item is open and asks for "other traumatic events." The LITE generates a total score ranging from 0 to 16.

Psychological symptoms in children and caregivers

The Strength and Difficulties Questionnaire Parent (SDQ-P) assesses general psychological problems in children and is available for caregivers of children aged between 2 and 17 (Goodman, 1997, 2001). The SDQ consists of 25 items rated on a 3-point Likert scale ranging from 0 ("not true") to 2 ("certainly true"). The items are allocated to four scales assessing emotional symptoms, conduct problems, hyperactivity/inattention, and peer problems; as well as one scale reflecting prosocial behavior. There is also an impact supplement where overall distress and impairment in the child's daily life is scored from 0 ("not at all/only a little") to 2 ("a great deal") generating an impact score ranging from 0 to 10. Cut-off scores were suggested by Malmberg et al.

(2003) and supported by Dahlberg et al. (2019). For children aged 3–5 total difficulties score ≥ 11 and impact score of ≥ 1 was used. Cronbach's alpha for the total scale was .67.

The Hopkins Symptom Check List-25 (HSCL-25) is a short form of Symptom Checklist-90 (Derogatis et al., 1974; Reshvanloo & Shamir, 2016) and assesses current symptoms of anxiety, depression, and somatic troubles as assessed by the caregivers. The 25 statements are summed up and divided into a number of items which results in a Global Severity Index (GSI) indicating general psychological problems. Swedish norms are available for GSI, where scores above cutoff ≥ 0.49 , for women, and ≥ 0.32 for men, indicate psychological problems (Fridell et al., 2002; Lundin et al., 2015). Cronbach's alpha for the total scale was .95.

Posttraumatic stress symptoms in children and caregivers

The Young Child PTSD Checklist (YCPC) is a checklist that assesses traumatic exposure and PTSD-symptoms in children aged 1–6 years (Scheeringa, 2013). Note that YCPC is designed for research and assessment during treatment, not for clinical PTSD diagnoses. The checklist consists of two parts, and for this study, only the second part was used in which 30 items measuring PTSD-symptoms and their degree of occurrence in young children on a 4-point Likert scale ranging from 0 (“not at all”) to 4 (“every day”). The YCPC produces an overall total symptom scale, ranging from 0 to 120, and three subscales: reexperiencing, avoidance, and arousal. There is also a six-item functional impairment supplement where the child's ability to function in various areas is scored from 0 (“hardly never”) to 4 (“every day”) generating a total score ranging from 0 to 24. The scales have two suggested cutoffs, one for clinical attention (CA) and one for probable PTSD-diagnosis (PTSD). Total score for CA is 12 and for PTSD 26. For subscales suggested cutoffs are Reexperiencing: CA = 4 and PTSD = 8; Avoidance: CA = 2 and PTSD = 4; Arousal: CA = 4 and PTSD = 10 and for the supplement Functional impairment: CA = 2 and PTSD = 4. The Cronbach's alpha for the total scale was 0.89.

The Impact of Event Scale-Revised (IES-R) is a trauma symptoms inventory assessing subjective distress for adults (Creamer et al., 2003; Weiss,

2004). The 22 items are rated on a 5-point Likert scale ranging from 0 to 4. A total score is summed ranging from 0 to 88. A mean score is calculated as for three subscales: intrusion, avoidance, and hyperarousal. While not a diagnostic instrument, it is suggested that a mean of ≥ 1.89 on any subscale indicates problems and a mean of ≥ 1.80 on the total score indicates PTSD (Weiss, 2007). Analyses are based on mean scores as primary outcomes and clinical cutoff scores (categorical). Cronbach's alpha for the total scale was 0.95.

Caregivers' perceptions of their relationship with their child

The Caregiving Helplessness Questionnaire (CHQ) is a questionnaire to screen for parental caregiving disorganization of children 3–11 years (Solomon & George, 2011). The questionnaire consists of 25 statements on experienced helplessness (six items, e.g., “I feel that I am a failure as a mother”), fear (six items, e.g., “I am frightened of my child”), and reversed child-caregiver roles, i.e., child caregiving (six items, e.g., “My child is very sensitive to the feelings and needs of others”). Answers are given on a 5-point Likert scale, ranging from 1 to 5, and generate mean scores for the three subscales: mother helpless, mother and child frightened, and child caregiving, and a total score from 25 to 125. High scores indicate disorganized caregiving. Analyses are based on mean scores as primary outcomes. Cronbach's alpha for the total scale was 0.38.

The Parental Locus of Control (PLOC) is a questionnaire for the assessment of the parental locus of control and consists of five subscales (Campis et al., 1986). In this study, only the Parental Control sub-scale of PLOC was used. It consists of 10 items assessing parents' experienced ability to control their child's behavior. Items are scored on a 5-graded Likert scale ranging from 1 (“I totally disagree”) to 5 (“I totally agree”). Parents experiencing problems with controlling their child produce higher ratings on the subscale. Cronbach's alpha for the scale was 0.60.

Statistical analyses

Treatment effects were analyzed by means of paired samples *t*-tests (within-group differences) between T1 and T2 ($p \leq .05$). Effect sizes were

computed as Cohen's d , specific to paired samples, where 0.2 indicates a small effect, 0.5 a medium effect, and 0.8 indicates a large effect. To explore possible differences between children living with biological versus foster caregivers, the non-parametric Mann-Whitney U test was used due to the small sample size. Pearson's product-moment correlation coefficient (r) tested for possible associations between reported changes in child and caregiver outcomes, using standardized values (z -scores) for the differences from T1 to T2. Associations (r) are considered weak at 0.10, moderate at 0.30, and strong at 0.50. A hierarchical regression analysis (*Backward* model) was tested to further explore the correlation analysis of differences. Clinical cutoff scores on the SDQ-P, the YCPC, and norm data on the HSCL-25 were used for clinical significance. Descriptive statistics were used to summarize reported exposure to potentially traumatic events on the VMB, the VIF, and the LITE. All statistical calculations were performed using SPSS Statistics 28.0.1.1).

Results

Child exposure to potential traumatic events

Nearly half of the children, 25 children, had been subjected to physical violence, and 26 children to psychological violence. Most of the children ($n = 38$) had witnessed IPV, and five children had witnessed sexual abuse (two of these children were also subjected to sexual abuse). Five children had been sexually abused, as assessed by VMB ($n = 54$). No significant differences regarding potential traumatic exposure were shown between children living with biological parents or with foster parents on VMB using a Mann-Whitney U test (*ns.*).

Caregiver exposure to potential traumatic events

The caregiver's average lifetime incidence of potentially traumatic events was 8.58 ($SD = 2.49$; $n = 53$), as assessed with the LITE. The average for non-interpersonal events was 4.13 ($SD = 1.47$) and for interpersonal events 3.75 ($SD = 1.45$). Almost half of the caregivers had been subjected to physical violence (49%) and physical threats (45%). Being

tied up or locked up had occurred to a lesser degree (23%). Close to one-third reported being subjected to sexual abuse (28%). Approximately a quarter of the caregivers reported being exposed to IPV during their childhood (23%). Approximately two-thirds of the 56 caregivers reported being subjected to physical violence (66%) and psychological violence (64%) as an adult, as assessed with the VIF.

Outcome of the intervention

Outcomes are presented as differences between data reported before the CPP therapy (T1) and after ≤ 20 dyadic therapy sessions (T2).

Psychological symptoms in children

The children's behavioral and emotional problems decreased from T1 to T2, as assessed by SDQ-P on the Total difficulties score, $t(55) = 4.28$, 95% CI (1.67 to 4.61), $p < .001$, with a medium effect size ($d = 0.57$). The descriptive statistics for SDQ-P and its subscales are presented in Table 1. The improvement seems to be due to changes on the subscales emotional symptoms, $t(55) = 3.23$, 95% CI (0.41 to 1.74), $p = .002$; and Conduct problems, $t(55) = 3.28$, 95% CI (0.29 to 1.20), $p = .002$, with effect sizes (Cohen's d) 0.43 and 0.44, respectively. Reductions were also shown on the supplement Impact score $t(55) = 2.47$, 95% CI (0.13 to 1.29), $p = .02$, $d = 0.33$. Almost half of the children scores below the clinical cutoff on the scales for total difficulties (46%), and impact score (48%) was reported at T2. Hence, the proportion of children with a total difficulties score over the clinical cutoff was reduced from 71% to 54% between T1 and T2. A Mann-Whitney U test of the scales indicated no significant differences between children living with biological parents and foster parents concerning the change between T1 and T2 on the SDQ-P (*ns.*).

Posttraumatic stress symptoms in children

Posttraumatic stress symptoms in YCPC in children were reduced, $t(55) = 4.48$, 95% CI (4.02 to

Table 1. Children's symptoms on the strengths and difficulties questionnaire (SDQ-P) and the young child PTSD checklist (YCPC) at T1 and T2 ($n = 56$).

Measure	T1	T2	<i>d</i>
	<i>M (SD)</i>	<i>M (SD)</i>	
SDQ-P			
Total difficulties score	16.32 (7.15)	13.18 (6.96)	0.57***
Impact score	2.38 (2.32)	1.66 (2.29)	0.33*
Emotional symptoms	4.86 (2.95)	3.79 (2.653)	0.43*
Conduct problems	3.13 (1.95)	2.38 (1.99)	0.44*
Hyperactivity/inattention	5.09 (2.54)	4.89 (3.11)	–
Peer problems	3.50 (2.87)	3.20 (2.78)	–
Prosocial behavior	6.89 (2.27)	6.88 (3.18)	–
YCPC			
Total	29.25 (14.28)	21.96 (16.6)	0.60***
Reexperiencing	4.18 (3.21)	3.13 (3.27)	0.45**
Avoidance	4.98 (4.01)	4.16 (4.17)	–
Arousal	6.95 (4.05)	5.20 (4.42)	0.51***
Functional impairment	7.25 (4.70)	5.35 (4.50)	0.51***

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

10.55), $p < .001$, $d = 0.60$. The descriptive statistics for the YCPC and its subscales are presented in Table 1. Improvements are reflected in two subscales: Arousal, $t(55) = 3.81$, 95% CI (0.83 to 2.67), $p < .001$, $d = 0.51$; and Reexperiencing $t(55) = 3.35$, 95% CI (0.42 to 1.68), $p = .001$, $d = 0.45$; and in the supplement Functional Impairment $t(54) = 3.81$, 95% CI (0.90 to 2.91), $p < .001$, $d = 0.51$. No changes were shown on the Avoidance subscale (*ns.*). At T1, symptoms indicating probable PTSD were reported for over half of the children (59%). At the time of T2, the proportion had decreased to approximately one-third (36%). Still, symptoms indicating a need for clinical attention were reported for about one-third of the children at T1 (34%, $n = 19$) and T2 (30%, $n = 17$). A Mann-Whitney U test of YCPC revealed no significant differences on PTSD-symptoms between children living with biological parents or in foster care (*ns.*).

Psychological symptoms in caregivers

General psychological symptoms in caregivers were reduced, $t(53) = 2.15$, 95% CI (0.01 to 0.36), $p < .001$, $d = 0.29$, as assessed with the HSCL-25. At T1, caregivers showed a mean score of symptoms ($M = 1.32$, $SD = 0.80$) above clinical cutoff (0.49). As the sample in total was comprised of 54 women and 3 men norm data for women was used. Even though reductions were shown at T2, the mean score of symptoms remained over the clinical cutoff ($M = 1.13$, $SD = 0.95$).

Posttraumatic stress symptoms in caregivers

Caregivers' posttraumatic symptoms (IES-R) decreased from T1 to T2, $t(54) = 3.95$, 95% CI (4.03 to 12.37), $p < .001$, $d = 0.52$. Reductions were shown on all subscales: Intrusion $t(54) = 4.05$, 95% CI (0.28 to 0.82), $p < .001$, $d = 0.55$, Avoidance $t(53) = 3.32$, 95% CI (0.12 to 0.48), $p < .001$, $d = 0.45$, and Hyperarousal $t(54) = 2.46$, 95% CI (0.06 to 0.62), $p = .009$, $d = 0.33$. The descriptive statistics for the IES-R and its subscales are presented in Table 2.

Caregivers' perceptions of their relationship with their child

The instrument measuring signs of disorganized attachment (CHQ) showed a reduction on the total score $t(54) = 3.99$, 95% CI (2.20 to 6.64), $p < .001$, $d = 0.54$, from T1 to T2. The descriptive statistics for the CHQ and its subscales are presented in Table 2. This reduction seems to be due to the subscales of Helplessness, $t(54) = 4.06$, 95% CI (1.31 to 3.86), $p < .001$, and Fear $t(54) = 4.27$, 95% CI (1.12 to 3.10), $p < .001$, both showing medium effect sizes ($d = 0.55$) and ($d = 0.58$), respectively. No reductions were shown on the third subscale, Reversed Parenting (*ns.*).

The caregivers' sense of ability to control their child's behavior improved, $t(3.90)$, 54, 95% CI (0.15 to 0.48), $p < .001$, $d = 0.53$, from T1 to T2. The descriptive statistics for the PLOC are presented in Table 2.

Table 2. Caregivers' symptoms on the *the impact of event scale-revised (ies-r)* and *self-rated caregiving capacity on the caregiving helplessness questionnaire (chq)*, and the parental locus of control (PLOC) at T1 and T2 ($n = 55$).

Measure	T1	T2	<i>d</i>
	<i>M (SD)</i>	<i>M (SD)</i>	
IES-R			
Total	1.77 (0.96)	1.36 (1.01)	0.52***
Intrusion	1.96 (1.04)	1.41 (1.15)	0.55***
Avoidance	1.59 (0.98)	1.29 (1.08)	0.45***
Hyperarousal	1.72 (1.161)	1.38 (1.11)	0.33**
CHQ			
Total	43.80 (8.05)	39.38 (8.84)	0.54***
Mother Helpless	12.69 (4.74)	10.11 (4.74)	0.55***
Mother-Child Frightened	11.44 (3.07)	9.33 (2.91)	0.58***
Child Caregiving	19.67 (3.96)	19.95 (5.06)	–
PLOC			
Parental control	2.43 (0.65)	2.11 (0.58)	0.53***

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

Associations in outcomes of psychological symptoms and PTSD-symptoms in children and caregivers and caregivers' perceptions of their relationship with their child

Correlations (Pearson's correlation coefficient, r) between the children's symptoms of general psychological problems and PTSD-symptoms and the caregiver's corresponding symptoms and perceptions of their relationship with their child are shown in Table 3. The strongest associations were shown between reduced caregiver perceptions of signs of disorganized attachment (CHQ) and reductions in child PTSD symptoms (YCPC). Strong associations were also shown in reductions between caregiver general psychological problems (HSCL-25) and child general psychological problems (SDQ-P).

To complement the correlation analysis of differences as presented in Table 3, a hierarchical

regression model (*Backward*) where children's YCPC at post-treatment as outcome was tested: children's baseline YCPC and SDQ at block one; caregivers' baseline PLOC, CHQ, and SCL at block two; and caregivers' post-treatment PLOC, CHQ, and SCL at block three. The Model summary showed a significant model fit for two models. Model 1 with YCPC at baseline, R^2 change = .536, $F(1, 51) = 60.000$, $p < .001$; and Model 2 with YCPC and parents' CHQ post-treatment, R^2 change = .088, $F(1, 51) = 11.937$, $p < .001$. A closer analysis of Model 2 showed that both child's YCPC at baseline, $\beta = .721$, $\beta = .609$, $t = 6.56$, $p < .001$, 95% CI [.500–.942], and the parents' CHQ post-treatment, $\beta = .613$, $\beta = .321$, $t = 3.455$, $p = .001$, 95% CI [.257–.969] were significant. In other words, the effectiveness of the treatment for the child depends on their initial level of trauma

Table 3. Correlations (2-tailed, Pearson's correlation coefficient, r) of difference scores between T1 and T2 on outcomes in child general psychological symptoms (SDQ-P) and PTSD symptoms (YCPC) and caregiver general psychological symptoms (HSCL-25), PTSD symptoms (IES-R) and caregivers' perceptions of their relationship with their child (CHQ and PLOC) using standardized values (z-scores) ($n = 56$ children, $n = 55$ caregivers).

	SDQ – P							YCPC				
	Total	Impact score	Emot.- Probl.	Conduct problems	Hyper-activity	Peer problems	Prosoc. behavior	Total	Reexp.	Avoid.	Arous.	Funct. impaire
HSCL-25	0.468***	0.377*	0.230	0.152	0.499***	0.059	0.008	0.399*	0.251	0.159	0.376*	0.349**
IES-R Tot	0.307*	0.314*	0.100	0.213	0.384*	–.047	–.052	0.365*	0.418*	0.130	0.340*	0.193
Intrusion	0.188	0.136	0.052	0.137	0.321*	–.030	–.192	0.280*	0.388*	0.071	0.303*	0.132
Avoidance	0.258	0.351**	0.103	0.126	0.153	0.161	0.061	0.213	0.249	0.007	0.117	0.265
Hyperarousal	0.304*	0.298*	0.187	0.060	0.244	0.137	0.047	0.302*	0.329*	0.148	0.308*	0.025
PLOC	0.378*	0.062	0.205	0.245	0.366**	–.070	–.041	0.442***	0.080	0.322*	0.344**	0.489***
CHQ Tot	0.444***	0.185	0.242	0.357*	0.362**	–.028	0.219	0.527***	0.355*	0.274*	0.360*	0.536***
Helpless	0.419**	0.260	0.170	0.209	0.477***	–.039	0.125	0.565***	0.173	0.272*	0.576***	0.524***
Frightened	0.269*	–.026	0.011	0.397**	0.437*	–.271*	0.149	0.480***	0.283*	0.221	0.298*	0.593***
Child caregiv.	0.184	0.105	0.307*	–.197	–.208	0.255	0.179	–.027	0.285*	0.046	–.230	–.058

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

symptoms and the degree to which the relationship with the parent improved during treatment.

Discussion

The current study aimed to evaluate the effectiveness of CPP in a naturalistic multi-site setting in Sweden. Outcomes were examined in a sample of traumatized children aged 2–6 years and their caregivers, including biological or foster parents. Consistent with previous research, the results indicated improvements in the children's overall psychological symptoms, as well as a reduction in PTSD symptoms. A comparison with previous RCTs of CPP therapy, with effect sizes shown in reductions of general psychological symptoms ($d = 0.24$; A. F. Lieberman et al., 2005 and $d = 0.41$; A. F. Lieberman et al., 2006) and in PTSD symptoms ($d = 0.63$, A. F. Lieberman et al., 2005) support that the effect of the method is sustainable when implemented in a naturalistic setting in a different cultural context.

In the present study, children participating with a foster parent appeared to benefit equally as children participating with a biological parent. The results indicate reduced symptoms in children and caregivers, reduction of perceived signs of disorganized attachment and improved sense of parental control. Enhancing child mental health in foster children and the quality of child-foster caregiver relationship may help to stabilize unsettled upbringing conditions. The result is in line with a previous study of children in foster care undergoing CPP (Weiner et al., 2009). Providing children in foster care with specialized mental health care addressing their complex needs to ensure present and future well-being and involving foster caregivers in treatment has been emphasized as well as the need to strengthen their access to interventions (Midgley et al., 2019; Szilagyi et al., 2015).

The caregivers in the present study showed a decrease in symptoms of general psychological distress, consistent with previous RCTs using the same measure (HSCL-25) ($d = 0.38$, A. F. Lieberman et al., 2005, 2006). The caregivers also experienced a reduction in PTSD symptoms. It is noteworthy that the reduction in PTSD symptoms was general, whereas previous studies have shown a decrease, specifically in avoidant

symptoms ($d = 0.50$, A. F. Lieberman et al., 2005, 2006). CPP is designed to address the adult's trauma-related deficits that can negatively impact the child–caregiver relationship, as it is known that a caregiver's traumatic stress can diminish sensitivity and responsiveness to the child's needs. By targeting the child–caregiver relationship in CPP, caregivers can learn to manage their own difficulties (Chu et al., 2021).

The current study found that improvements in the children's general psychological and trauma symptoms were linked to corresponding improvements in caregivers' symptoms. The strongest associations in the current study were shown between the decrease in caregiver's disorganized attachment and reductions in the child's PTSD-symptoms. The findings were supported by correlations with an improved sense of parental control, where an increased sense of parental control was associated with decreased signs of disorganized attachment in the child – caregiver relationship. Further analysis indicated that the effectiveness of CPP for children in the current study was contingent upon their pre-treatment degree of trauma symptoms and the decrease in caregiver signs of disorganized attachment observed post treatment. Even though the small sample size may introduce a risk of error, the results are in line with previous studies.

Despite the use of various study designs and measurements limiting direct comparisons, the result of the present study mirrors the beneficial effects previously demonstrated in RCTs, such as a significant reduction of disorganized attachment (Cicchetti et al., 2006; Toth et al., 2002, 2006). Thus, the present study supports the idea that CPP addresses symptoms in the individual child and caregiver, as well as the child–caregiver relationship.

Despite the overall reduction in symptoms, general psychological symptoms over clinical cutoff remained for half of the children and PTSD-symptoms were reduced but remained at a level indicating a need for clinical attention among one-third of the children, which needs to be further explored. Analysis of remaining symptoms in relation to clinical cutoff is scarcely reported in child psychotherapy research but might be reflected in the relatively modest effect sizes presented. Studies of trauma-focused interventions in natural clinical

settings have shown that a significant part of participating children continue to experience symptoms at clinical levels. This emphasizes the importance of developing effective treatment methods and investigating contextual factors that may impact interventions, as well as the need for evaluation of symptoms during and after treatment.

Mediating and moderating factors, such as varying exposure to potentially traumatic events and number of therapy sessions, should also be further analyzed aiming to model the intervention to different needs and subgroups of children. The current study indicated positive results with relatively few therapy sessions. Longer duration of treatment is often a response to severe child symptoms and safety concerns (Hagan et al., 2017). Meta-analyses of the effects of attachment-based interventions have yielded inconsistent results regarding treatment duration (Bakermans-Kranenburg et al., 2005; Facompré et al., 2018). In caregivers, general psychological symptoms decreased, but the mean score remained over the clinical cutoff at follow-up. The remaining symptoms in caregivers have been shown in a previous study of CPP (Guild et al., 2021). When psychotherapy methods are implemented in a new context and in a naturalistic clinical setting, lower effect sizes than in previous studies are expected. This does not apply to the present study, but to assure these effects a follow-up study within a similar naturalistic context is needed.

Study strengths and limitations

A main strength of the study is that it was conducted in a naturalistic multi-site setting representative of Swedish clinical settings. As such, it reflects the therapists' diversity of training and experience, as well as regular practices with mixed workloads. The patients in the study reflect regular clinical practice, with presumably high occurrences of comorbidity. These conditions amplify the external validity of the study, which is of particular importance in a feasibility study. Furthermore, the low attrition rate in pre-post measurements strengthens the internal validity. However, the relatively small sample size, the reliance on caregiver reports, and the lack of a control group cautions for far-reaching

conclusions. Caregiver reports have been argued to be associated with an increased risk for response bias (Rosenman et al., 2011). Further limitations include non-direct measurements of attachment quality and the use of LOCF, a conservative method to handle attrition which is simple but has statistical limitations. However, LOCF might be appropriate if outcomes are carried forward from relatively recent measures, as in this study (Bakker et al., 2019). The use of a control group, e.g., "treatment as usual," most often given as caregiver counseling, or preferably an active control, would clearly strengthen an upcoming study. The use of a more sophisticated attachment measure combined with observational and/or therapist assessment and follow-up measures would also strengthen a future study. Nevertheless, despite the reported limitations, the result of this study is promising in showing additional support for the dissemination of CPP in Sweden.

Future directions

The result of this study supports previous findings that CPP addresses and reduces symptoms of the individual child and caregiver and improves aspects of child-caregiver relationship. The effect sizes shown are in line with results from previous RCTs and support the sustainability of the method when implemented in a naturalistic clinical context in another cultural context. Our conclusion is that CPP is a promising method for traumatized preschool children regardless of whether they undergo treatment with their biological parent or a foster parent. Further studies on the long-term effectiveness of CPP are needed.

Acknowledgments

Warm and sincere thanks to all children, caregivers and therapists contributing to this study.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The study was supported by The Erica Foundation, Stiftelsen Clas Groschinsky and The National Board of Health and Welfare, Sweden.

ORCID

Anna Norlén  <http://orcid.org/0000-0001-6221-669X>
Charlotte Bäckman  <http://orcid.org/0000-0002-8744-0425>
Agneta Thorén  <http://orcid.org/0000-0002-0305-7366>
Kjerstin Almqvist  <http://orcid.org/0000-0002-3560-0394>

Ethical approval

The study was approved by the Regional Ethics Committee in Uppsala, Sweden (Dnr 2012/259–13 and 2016/413). The participating and/or juridical custodian caregivers gave verbal and written consent to their participation in the study.

References

- Almqvist, K., Bäckman, C., Anderzén-Carlsson, A., Norlén, A., Pernebo, K., & Massoudi, P. (2018). *iRisk II: Utveckling av bedömningsinstrument och stödinsatser för våldsutsatta barn - rapport från två delprojekt*. Arbetsrapport.
- Almqvist, K., & Broberg, A. (2004). *Barn som bevittnat våld mot mamma - en studie av kvinnor och barn som vistas på Kvinnojourer i Göteborg*. Rapport från Göteborgs Stad, Lundby Stadsdelsförvaltning.
- Bakermans-Kranenburg, M. J., van IJzendoorn, M. H., & Juffer, F. (2005). Disorganized infant attachment and preventive interventions: A review and meta-analysis. *Infant Mental Health Journal*, 26(3), 191–216. <https://doi.org/10.1002/imhj.20046>
- Bakker, A., Cai, J., English, L., Kaiser, G., Mesa, V., & Van Dooren, W. (2019). Beyond small, medium, or large: Points of consideration when interpreting effect sizes. *Educational Studies in Mathematics*, 102(1), 1–8. <https://doi.org/10.1007/s10649-019-09908-4>
- Beidas, R. S., & Kendall, P. C. (2014). *Dissemination and implementation of evidence-based practices in child and adolescent mental health*. Oxford University Press.
- Bowen, D. J., Kreuter, M., Spring, B., Cofta-Woerpel, L., Linnan, L., Weiner, D., Bakken, S., Kaplan, C. P., Squiers, L., Fabrizio, C., & Fernandez, M. (2009). How we design feasibility studies. *American Journal of Preventive Medicine*, 36(5), 452–457. <https://doi.org/10.1016/j.amepre.2009.02.002>
- Broberg, A., Almqvist, K., Appell, P., Axberg, U., Cater, Å., Draxler, H., Eriksson, M., Grip, K., Hjärthag, F., Hultmann, O., Iversen, C., & Röbbäck de Souza, K. (2015). *Utveckling av bedömningsinstrument och stödinsatser för våldsutsatta barn*. Psykologiska institutionen, Göteborgs universitet.
- Campis, L. K., Lyman, R. D., & Prentice-Dunn, S. (1986). The parental locus of control scale: Development and validation. *Journal of Clinical Child Psychology*, 15(3), 260–267. https://doi.org/10.1207/s15374424jccp1503_10
- Chu, A. T., Ghosh Ippen, C., & Lieberman, A. F. (2021). It's all about the relationship: The role of attachment in child-parent psychotherapy. *Research on Child and Adolescent Psychopathology*, 49(5), 591–593. <https://doi.org/10.1007/s10802-020-00741-5>
- Cicchetti, D., Rogosch, F. A., & Toth, S. L. (2006). Fostering secure attachment in infants in maltreating families through preventive interventions. *Development and Psychopathology*, 18(3), 623–650. <https://doi.org/10.1017/S0954579406060329>
- Cohen, J. A., & Mannarino, A. P. (1996). A treatment outcome study for sexually abused preschool children: Initial findings. *Journal of the American Academy of Child & Adolescent Psychiatry*, 35(1), 42–50. <https://doi.org/10.1097/00004583-199601000-00011>
- Creamer, M., Bell, R., & Failla, S. (2003). Psychometric properties of the impact of event scale - revised. *Behaviour Research and Therapy*, 41(12), 1489–1496. <https://doi.org/10.1016/j.brat.2003.07.010>
- Dahlberg, A., Fält, E., Ghaderi, A., Sarkadi, A., & Salari, R. (2019). Swedish norms for the strengths and difficulties questionnaire for children 3–5 years rated by parents and preschool teachers. *Scandinavian Journal of Psychology*, 61(2), 253–261. <https://doi.org/10.1111/sjop.12606>
- David, P., & Schiff, M. (2015). Learning from bottom-up dissemination: Importing an evidence-based trauma intervention for infants and young children to Israel. *Evaluation and Program Planning*, 53, 18–24. <https://doi.org/10.1016/j.evalprogplan.2015.07.012>
- Deblinger, E., Staufer, L. B., & Steer, R. A. (2001). Comparative efficacies of supportive and cognitive behavioral group therapies for young children who have been sexually abused and their non-offending mothers. *Child Maltreatment*, 6(4), 332–343. <https://doi.org/10.1177/1077559501006004006>
- Derogatis, L. R., Lipman, R. S., Rickels, K., Uhlenhuth, E. H., & Covi, L. (1974). The Hopkins Symptom Checklist (HSCL): A self-report symptom inventory. *Behavior Sciences*, 19(1), 1–15. <https://doi.org/10.1002/bs.3830190102>
- De Roos, C., Van der Oord, S., Zijlstra, B., Lucassen, S., Perrin, S., Emmelkamp, P., & De Jongh, A. (2017). Comparison of eye movement desensitization and reprocessing therapy, cognitive behavioral writing therapy, and wait-list in pediatric posttraumatic stress disorder following single-incident trauma: A multicenter randomized clinical trial. *Journal of Child Psychology and Psychiatry*, 58(11), 1219–1228. <https://doi.org/10.1111/jcpp.12768>
- Downey, R. G., & King, C. (1998). Missing data in Likert ratings: A comparison of replacement methods. *The*

- Journal of General Psychology*, 125(2), 175–191. <https://doi.org/10.1080/00221309809595542>
- Eslinger, J. G., Sprang, G., & Otis, M. (2014). Children with multi-trauma histories. Special considerations for care and implications for treatment selection. *Journal of Family Studies*, 24(9), 2757–2768. <https://doi.org/10.1007/s10826-014-0079-1>
- Facompré, C. R., Bernard, K., & Waters, T. E. A. (2018). Effectiveness of interventions in preventing disorganized attachment: A metaanalysis. *Development and Psychopathology*, 30(1), 1–11. <https://doi.org/10.1017/S0954579417000426>
- Fearon, R. P., Bakermans-Kranenburg, M. J., van IJzendoorn, M. H., Lapsley, A., & Roisman, G. I. (2010). The significance of insecure attachment and disorganization in the development of children's externalizing behavior: A meta-analytic study. *Child Development*, 81(2), 435–456. <https://doi.org/10.1111/j.1467-8624.2009.01405.x>
- Fong, V. C., Hawes, D., & Allen, J. L. (2019). A systematic review of risk and protective factors for externalizing problems in children exposed to intimate partner violence. *Trauma, Violence, & Abuse*, 20(2), 149–167. <https://doi.org/10.1177/1524838017692383>
- Forslund, T., Granqvist, P., van IJzendoorn, M., & Sagi – Schwartz, A. (2021). Attachment goes to court: Child protection and custody issues. *Attachment & Human Development*, 24(1), 1–52. <https://doi.org/10.1080/14616734.2020.1840762>
- Fridell, M., Cesarec, Z., Johansson, M., & Malling Thorsen, S. M. (2002). *SCL-90 Svensk normering, standardisering och validering av symtomskalan [SCL-90 Swedish norms, standardization, and validation of the symptom scale]*. Report 4/02Stockholm. The National Board of Institutional Care (SiS),
- Ghosh Ippen, C., Harris, W. W., Van Horn, P., & Lieberman, A. F. (2011). Traumatic and stressful events in early childhood: Can treatment help those at highest risk? *Child Abuse and Neglect*, 35(7), 504–513. <https://doi.org/10.1016/j.chiabu.2011.03.009>
- Goodman, R. (1997). The strengths and difficulties questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, 38(5), 581–586. <https://doi.org/10.1111/j.1469-7610.1997.tb01545.x>
- Goodman, R. (2001). Psychometric properties of the strengths and difficulties questionnaire. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(11), 1337–1345. <https://doi.org/10.1097/00004583-200111000-00015>
- Greenwald, R., & Rubin, A. (1999). Assessment of posttraumatic symptoms in children: Development and preliminary validation of parent and child scales. *Research on Social Work Practice*, 9(1), 61–75. <https://doi.org/10.1177/104973159900900105>
- Guild, D. J., Alto, M. E., Handley, E. D., Rogosch, F., Cicchetti, D., & Toth, S. L. (2021). Attachment and affect between mothers with depression and their children: Longitudinal outcomes of child parent psychotherapy. *Research on Child and Adolescent Psychopathology*, 49(5), 563–577. <https://doi.org/10.1007/s10802-020-00681-0>
- Gutermann, J., Schreiber, F., Matulis, S., Schwartzkopff, L., Deppe, J., & Steil, R. (2016). Psychological treatments for symptoms of posttraumatic stress disorder in children, adolescents, and young adults: A meta-analysis. *Clinical Child and Family Psychology Review*, 19(2), 77–93. <https://doi.org/10.1007/s10567-016-0202-5>
- Hagan, M. J., Brown, D. T., Sulki, M., Ghosh Ippen, C., Bush, N., & Lieberman, A. F. (2017). Parent and child trauma symptoms during child–parent psychotherapy: A prospective cohort study of dyadic change. *Journal of Traumatic Stress*, 30(6), 690–697. <https://doi.org/10.1002/jts.22240>
- Hasson, H., Sundell, K., & von Thiele Schwarz, U. (2014). Novel programs, international adoptions, or contextual adaptations? Meta-analytical results from German and Swedish intervention research. *Health Services Research*, 14(2), O32. <https://doi.org/10.1186/1472-6963-14-S2-O32>
- Heptinstall, E. (2000). Research note. Gaining access to looked after children for research purposes: Lessons learned. *British Journal of Social Work*, 30(6), 867–872. <https://doi.org/10.1093/bjsw/30.6.867>
- Hooker, L., Toone, E., Raykar, V., Humphreys, C., Morris, A., Westrupp, E., & Taft, A. (2019). Reconnecting mothers and children after violence (RECOVER): A feasibility study protocol of child–parent psychotherapy in Australia. *BMJ Open*, 9(5), e023653. <https://doi.org/10.1136/bmjopen-2018-023653>
- Hooker, L., Toone, E., Wendt, S., Humphreys, C., & Taft, A. (2022). RECOVER – Reconnecting mothers and children after family violence: The child–parent psychotherapy pilot. Research report, 05/2022. ANROWS.
- Hunt, K. A., Slack, K. S., & Berger, L. M. (2017). Adverse childhood experiences and behavioral problems in middle childhood. *Child Abuse & Neglect*, 67, 391–402. <https://doi.org/10.1016/j.chiabu.2016.11.005>
- Jouriles, E. N., McDonald, R., Rosenfield, D., Stephens, N., Corbitt-Shindler, D., & Miller, P. (2009). Reducing conduct problems among children exposed to intimate partner violence: A randomized clinical trial examining effects of Project Support. *Journal of Consulting & Clinical Psychology*, 77(4), 705–717. <https://doi.org/10.1037/a0015994>
- Landolt, M. A., Cloitre, M., & Schnyder, U. (2017). *Evidence-based treatments for trauma related disorders in children and adolescents*. Springer.
- Lieberman, A., Ghosh Ippen, C., & Van Horn, P. (2015). *Don't hit my mommy! A manual for child-parent psychotherapy with young children exposed to violence and other trauma* (2nd ed.). Zero to Three Press.
- Lieberman, A. F., Ghosh Ippen, C., & Van Horn, P. J. (2006). Child-Parent Psychotherapy: 6-month follow-up of a randomized control trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, 45(8), 913–918. <https://doi.org/10.1097/01.chi.0000222784.03735.92>

- Lieberman, A., & Van Horn, P. (2005). *Don't hit my mommy! A manual for child-parent psychotherapy with young witnesses of family violence*. Zero to Three Press.
- Lieberman, A. F., Van Horn, P. J., & Ghosh Ippen, C. (2005). Toward evidence-based treatment: Child-parent psychotherapy with preschoolers exposed to marital violence. *Journal of the American Academy of Child and Adolescent Psychiatry*, *44*(12), 1241–1248. <https://doi.org/10.1097/01.chi.0000181047.59702.58>
- Lippard, E. T. C., & Nemeroff, C. B. (2020). The devastating clinical consequences of child abuse and neglect: Increased disease vulnerability and poor treatment response in mood disorders. *American Journal of Psychiatry*, *177*(1), 20–36. <https://doi.org/10.1176/appi.ajp.2019.19010020>
- Lundin, A., Hallgren, M., & Forsell, Y. (2015). The validity of the symptom checklist depression and anxiety subscales: A general population study in Sweden. *Journal of Affective Disorders*, *183*, 247–252. <https://doi.org/10.1016/j.jad.2015.05.024>
- Malmberg, M., Rydell, A.-M., & Smedje, H. (2003). Validity of the Swedish version of the strengths and difficulties questionnaire (SDQ-Swe). *Nordic Journal of Psychiatry*, *57*(5), 357–363. <https://doi.org/10.1080/08039480310002697>
- Mavranouzouli, I., Megnin-Viggars, O., Daly, C., Dias, S., Stockton, S., Meiser-Stedman, R., Trickey, D., & Pilling, S. (2020). Research Review: Psychological and psychosocial treatments for children and young people with posttraumatic stress disorder: A network meta-analysis. *Journal of Child Psychology and Psychiatry*, *61*(1), 18–29. <https://doi.org/10.1111/jcpp.13094>
- McCrorry, E., DeBrito, S., & Viding, E. (2012). The link between child abuse and psychopathology: A review of neurobiological and genetic research. *Journal of the Royal Society of Medicine*, *105*(4), 151–156. <https://doi.org/10.1258/jrsm.2011.110222>
- McDonald, H., Beeghly, M., Grant-Knight, W., Augustyn, M., Woods, R., Cabral, H. Rose-Jacobs, R., Saxe, G. N., Frank, D. (2008). Longitudinal association between infant disorganized attachment and childhood posttraumatic stress symptoms. *Development and Psychopathology*, *20*(2), 493–508. <https://doi.org/10.1017/S0954579408000242>
- McGuire, A., Steele, R. G., & Singh, M. N. (2021). Systematic review on the application of trauma-focused cognitive behavioral therapy (TF-CBT) for preschool-aged children. *Clinical Child and Family Psychology Review*, *24*(1), 20–37. <https://doi.org/10.1007/s10567-020-00334-0>
- Mezey, G., Robinson, F., Campbell, R., Gillard, S., Macdonald, G., Meyer, D., Bonell, C., & White, S. (2015, December). Challenges to undertaking randomized trials with looked after children in social care settings. *Trials*, *16*(1), 206. <https://doi.org/10.1186/s13063-015-0708-z>
- Midgley, N., Besser, S. J., Fearon, P., Wyatt, S., & Wellsted, D. (2019). The herts and minds study: Feasibility of a randomized controlled trial of mentalization-based treatment versus usual care to support the wellbeing of children in foster care. *BMC Psychiatry*, *19*(1), 215. <https://doi.org/10.1186/s12888-019-2196-2>
- Norlén, A., Thorén, A., & Almqvist, K. (2021). Implementing child–parent psychotherapy (CPP) in Sweden: A qualitative study exploring experiences by caregivers taking part of the intervention with their child. *Journal of Infant, Child, and Adolescent Psychotherapy*, *20*(2), 152–168. <https://doi.org/10.1080/15289168.2021.1925001>
- Reshvanloo, F. T., & Shamir, A. S. (2016). Construct validity and reliability of Symptom Checklist-25 (SCL-25). *Journal of Fundamentals of Mental Health*, *18*(1), 48–56.
- Rosenman, R., Tennekoon, V., & Hill, L. G. (2011). Measuring bias in self-reported data. *International Journal of Behavioural & Healthcare Research*, *2*(4), 320–332. <https://doi.org/10.1504/IJBHR.2011.043414>
- Salloum, A., Wang, W., Robst, J., Murphy, T. K., Scheeringa, M., Cohen, J., & Storch, E. (2016). Stepped care versus standard trauma-focused cognitive behavioral therapy for young children. *Journal of Child Psychology and Psychiatry*, *57*(5), 14–622. <https://doi.org/10.1111/jcpp.12471>
- Salmon, K., & Bryant, R. (2002). Posttraumatic stress disorder in children. The influence of developmental factors. *Clinical Psychology Review*, *22*(2), 163–188. [https://doi.org/10.1016/S0272-7358\(01\)00086-1](https://doi.org/10.1016/S0272-7358(01)00086-1)
- Scheeringa, M. S. (2013). *Young Child PTSD Checklist (YCPC)*. https://www.michaelscheeringa.com/uploads/1/2/0/2/120202234/ycpc_del1_2_combined_swedish.pdf
- Scheeringa, M. S., Weems, C. F., Cohen, J. A., Amaya-Jackson, L., & Guthrie, D. (2011). Trauma-focused cognitive-behavioral therapy for posttraumatic stress disorder in three-through six-year-old children: A randomized clinical trial. *Journal of Child Psychology and Psychiatry*, *52*(8), 853–860. <https://doi.org/10.1111/j.1469-7610.2010.02354.x>
- Sleed, M., Li, E., Vainieri, I., & Midgley, N. (2023). The evidence base for psychodynamic interventions with children under 5 years of age and their caregivers: A systematic review and meta-analysis. *Journal of Infant, Child, and Adolescent Psychotherapy*, *22*(3), 179–214. <https://doi.org/10.1080/15289168.2023.2223739>
- Smith, A. B., Dopp, A. R., Perrine, C. M., Parisi, K. E., Vanderzee, K. L., John, S., Edge, N. A., & Kraner, T. L. (2020). Training providers at Children's Advocacy Centers to treat early childhood trauma: Perspectives on barriers, facilitators, and sustainability. *Children & Youth Services Review*, *118*, 105379. <https://doi.org/10.1016/j.childyouth.2020.105379>
- Solomon, J., & George, C. (2011). (Eds), *Disorganized attachment and caregiving*. The Guilford Press.
- Stronach, E. P., Toth, S.-L., Rogosch, F., & Cicchetti, D. (2013). Preventive interventions and sustained attachment security in maltreated children. *Development and Psychopathology*, *25*(4pt1), 919–930. <https://doi.org/10.1017/S0954579413000278>
- Szilagyi, M. A., Rosen, D. S., Rubin, D., Zlotnik, S., Szilagyi, M. A., Harmon, D., Jaudes, P., Jones, V. F., Lee, P., Nalven, L., Prock, L., Sagor, L., Schulte, E., Springer, S., Tonniges, T., Braverman, P. K., Adelman, W. P., Alderman, E. M. ...

- Vanderbilt, D. (2015). Health care issues for children and adolescents in foster care and kinship care. *American Academy of Pediatrics Technical Report*, 136(4), e1142–e1166. <https://doi.org/10.1542/peds.2015-2656>
- Thompson, R. A. (2016). Early attachment and later development: Reframing the questions. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications* (3rd ed. pp. s. 330–348). Guilford press.
- Toth, S. L., & Manly, J. T. (2019). Developmental consequences of child abuse and neglect: Implications for intervention. *Child Development Perspectives*, 13(1), 59–64. <https://doi.org/10.1111/cdep.12317>
- Toth, S. L., Maughan, A., Manly, J. T., Spagnola, M., & Cicchetti, D. (2002). The relative efficacy of two interventions in altering maltreated preschool children's representational models: Implications for attachment theory. *Developmental Psychopathology*, 14(4), 877–908. <https://doi.org/10.1017/S095457940200411X>
- Toth, S. L., Rogosch, F. A., Manly, J. T., & Cicchetti, D. (2006). The efficacy of toddler-parent psychotherapy to reorganize attachment in the young offspring of mothers with major depressive disorder: A randomized preventive trial. *Journal of Consulting and Clinical Psychology*, 74(6), 1006–1016. <https://doi.org/10.1037/0022-006X.74.6.1006>
- Trickey, D., Siddaway, A. P., Meiser-Stedman, R., 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(2), 122–138. <https://doi.org/10.1016/j.cpr.2011.12.001>
- Weiner, D. A., Schneider, A., & Lyons, J. S. (2009). Evidence-based treatment for trauma among culturally diverse foster care youth: Treatment retention and outcomes. *Children & Youth Services Review*, 31(11), 1199–1205. <https://doi.org/10.1016/j.childyouth.2009.08.013>
- Weiss, D. S. (Ed.). (2004). *The impact of event scale-revised* (2nd ed.). Guilford Press.
- Weiss, D. S. (2007). The Impact of Event Scale: Revised. In J. P. Wilson & C. S. Tang (Eds.), *Cross-cultural assessment of psychological trauma and PTSD* (pp. 219–238). Springer.
- Weisz, J. R., Baker, J., Ugueto, A. M., Herren, J., Afienko, S. R., & Rutt, C. (2011). Kernels vs. ears, and other questions for a science of treatment dissemination. *Clinical Psychology Science & Practice*, 18(1), 41–46. <https://doi.org/10.1111/j.1468-2850.2010.01233.x>
- Williamson, V., Creswell, C., Fearon, P., Hiller, R. M., Walker, J., & Halligan, S. L. (2017). The role of parenting behaviors in childhood posttraumatic stress disorder: A meta-analytic review. *Clinical Psychology Review*, 53, 1–13. <https://doi.org/10.1016/j.cpr.2017.01.005>
- Woolgar, F., Garfield, H., Dalgleish, T., & Meiser-Stedman, R. (2021). Systematic review and meta-analysis: prevalence of posttraumatic stress disorder in Trauma-exposed preschool-aged children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 61(3), 366–377. <https://doi.org/10.1016/j.jaac.2021.05.026>
- Zero to Three, National Center for Clinical Infant Programs. (2016). *Diagnostic classification of mental health and developmental disorders of infancy and early childhood: DC 0-5*. Zero To Three.