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Trauma Exposure, PTSD, and Parenting in a Community Sample of Low-income, Predominantly African-American Mothers and Children

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Abstract

Objectives—Trauma and posttraumatic stress disorder (PTSD) are associated with problematic parenting and incidence of trauma and PTSD in children of affected parents. In communities impacted by frequent trauma, parenting may be particularly important to children's PTSD risk. We examine relationships among maternal and child trauma and mental health, as well as problematic parenting.

Method—We recruited 112 mother-child dyads (50 girls, 62 boys; ages 8–12 years old) from a community sample of low-income, primarily African-American families. We examined rates of trauma exposure and PTSD symptoms in mothers and children, the association of maternal trauma and PTSD with self-reported child abuse potential and parenting stress (i.e., parental distress, dysfunctional parent-child interactions, and perceived child difficulty), and the impact of maternal trauma, PTSD, and parenting on child trauma and PTSD.

Results—Rates of trauma and PTSD symptoms were relatively high for mothers and children and included community and family violence. Maternal trauma and PTSD predicted child abuse potential, but only maternal PTSD predicted parental distress. Neither maternal trauma nor PTSD predicted parent-reported dysfunctional parent-child interactions or child difficulty. Maternal child abuse potential and child self-reported trauma, but not maternal trauma or PTSD, significantly predicted child self-reported PTSD. Parenting stress was not associated with child PTSD.

Conclusions—Trauma and PTSD in parents may impact parental distress and child abuse potential, potentially increasing children's risk for not only the experience of child abuse, but also PTSD. Child and family interventions should consider child and parental trauma and PTSD as important factors to address.

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Keywords

Trauma; PTSD; Parenting; Children; Intergenerational Risk

Exposure to trauma, both in childhood and adulthood, increases risk for a wide range of mental health problems across the lifespan, including posttraumatic stress disorder (Breslau, Chilcoat, Kessler, & Davis, 2014). Trauma and posttraumatic stress disorder (PTSD) are associated with decreased parenting satisfaction (Berz, Taft, Watkins, & Monson, 2008), emotional numbing toward children (Ruscio, Weathers, King, & King, 2002), and increased child abuse potential (Caliso & Milner, 1992; Kalebić Jakupčević & Ajduković, 2011). Furthermore, parental trauma exposure and PTSD are associated with increased incidence of PTSD and dysfunctional physiological stress response in the next generation (Alink, Cicchetti, & Rogosch, 2012; Jovanovic et al., 2011). Thus, trauma and PTSD in parents may increase trauma exposure in children (e.g., via child abuse potential) and at the same time impair children's coping strategies, as well as biological stress response, leaving children more vulnerable to the development of trauma-related psychopathology.

Trauma, Mental Health, and Parenting

The impact of parents' trauma exposure and mental health on parenting behavior has been documented across diverse study samples, including low-SES, urban minority families and combat veterans in the United States (Cohen, Hien, & Batchelder, 2008; Ruscio et al., 2002), war-exposed families in Palestine (Thabet, Ibraheem, Shivram, Van Millingen, & Vostanis, 2009), and families with parents who experienced trauma under the Khmer Rouge regime in Cambodia (Field, Muong, & Sochanvimean, 2013). Some studies demonstrate that trauma is associated with problematic parenting, regardless of trauma-related psychopathology (Cohen et al., 2008). For example, in a sample of low-socioeconomic (SES), urban minority mothers, lifetime cumulative trauma was positively associated with increased child abuse potential, physical discipline, psychological aggression, and punitiveness, even when accounting for PTSD (Cohen et al., 2008). Additionally, parental exposure to trauma is associated with a tendency to perceive one's child more negatively, such as perceiving the child to be difficult to manage or perceiving interactions with the child to be dysfunctional or disappointing, or to experience more distress in the parental role (Thakar, Coffino, & Lieberman, 2013; Lang, Gartstein, Rodgers, & Lebeck, 2010). Negative perceptions of children and parental distress are associated with increased child abuse potential (Rodriguez & Green, 1997; Schaeffer, Alexander, Bethke, & Kretz, 2005). Nevertheless, other studies suggest that trauma-related psychopathology best explains problematic parenting (Dias, Sales, Cardoso, & Kleber, 2014). For example, children of combat-exposed veterans of the Portuguese Colonial War reported experiencing more childhood emotional and physical neglect, but only if the parents had also developed PTSD (Dias et al., 2014). Additionally, parental PTSD is associated with increased parental distress and decreased parental satisfaction (Berz et al., 2008; McDonald, Slade, Spiby, & Iles, 2011). It is clear that trauma and mental health impact parenting behavior across many diverse study samples with variations in patterns of findings possibly attributable, in part, to varying sample demographics and trauma characteristics.

Child Trauma Exposure and Child Mental Health

Although it is important to understand the relationships among parental trauma, mental health, and parenting, the picture is incomplete without considering child outcomes. In a study of war-exposed children from Bosnia-Herzegovina, children's adjustment was associated not only with actual exposure, but also with the mental health of their mothers (Smith, Perrin, Yule, & Rabe-Hesketh, 2001). Similarly, among Palestinian children, children's distress was associated both with exposure to war and with maternal trauma-related distress (Qouta, Punamaki, & Sarraj, 2005). On the other hand, in a study of traumatized children and adolescents in the United States, problematic parenting, but not parental mental health, was associated with children's self-report of symptoms (Valentino, Berkowitz, & Stover, 2010). Moreover, low parental support and high parental stress mediated the relationship between child trauma exposure and PTSD and internalizing symptoms in samples of Palestinian children and African-American and Latino children (Thabet et al., 2009; Whitson, Bernard, & Kaufman, 2014). These studies demonstrate notable variability in findings related to the impact of parental mental health on and parenting on children's response to trauma.

Goals and Hypotheses

Although many studies address the impact of trauma and PTSD in families, few take into account traumatic exposure and PTSD symptoms for both parent and child. Furthermore, although some studies examine the impact of trauma in separate samples of low-SES, urban minority mothers and children (e.g., Cohen et al., 2008; Fitzpatrick & Boldizar, 1993), no study to date has examined rates of trauma and PTSD in both parents and children together in a low-SES, predominantly African-American sample.

The goals of the current study were to characterize the level of lifetime trauma exposure and level of PTSD symptoms in a community sample of low-income, primarily African-American mothers and children, to examine the relationships among trauma, PTSD symptoms, and problematic parenting in mothers, and to examine the contribution of maternal trauma, PTSD symptoms, parenting, and child trauma exposure to child PTSD symptoms.

We hypothesized that maternal trauma, PTSD, and problematic parenting would be significantly positively correlated with one another and that, when examined together, both maternal trauma and maternal PTSD would predict problematic parenting. We also hypothesized that maternal trauma, PTSD, and problematic parenting would be positively correlated with increased child self-report of trauma exposure and PTSD and that maternal trauma, PTSD, and problematic parenting would contribute child PTSD, even accounting for child trauma.

Method

Measures

Demographics Form—The Demographics Form is locally developed and assesses participant age, self-identified sex, self-identified race, education, and household monthly income. An additional subset of questions assess child age, child sex, parental status (i.e., biological mother, biologically-related guardian, and non-biologically related guardian guardian), and number of adults and minor children living in the home.

Traumatic Events Inventory (TEI; Gillespie et al., 2009)—The TEI is a 13-item measure of lifetime exposure. We created a total trauma exposure score by creating a sum of the number of different types of trauma to which participants reported exposures.

Modified PTSD Symptom Scale (MPSS; Ressler et al., 2011)—The MPSS is a 17-item self-report measure of current (past two weeks) symptoms of PTSD. The structure and content of the MPSS reflect the DSM-IV criteria for PTSD. We summed the MPSS frequency items to obtain a continuous measure of PTSD symptom severity ranging from 0 to 51. MPSS internal consistency for the current study was good (.92).

Child Abuse Potential Inventory—Second Edition (CAPI; Milner, 1994)—The CAPI is a 160-item self-report measure of risk for perpetration of physical child abuse. Items include statements based on attitudes and parenting behavior that have been observed in parents identified as being physically abusive. Seventy-seven items contribute to an overall Abuse Potential score, and remaining items contribute to validity indices, including the Faking Good Validity Index. Abuse Potential scores were analyzed continuously. Internal consistency in this study for the Abuse Potential scale was good (.92).

Parenting Stress Index-Third Edition, Short Form (PSI; Abidin, 1995)—The PSI is a 36-item parent self-report measure of parenting stress with subscale for Parental Distress, Parent-Child Dysfunctional Interactions, and Difficult Child, as well as a Defensive Responding Index. The PSI Short Form is strongly correlated (.94) with the full-length PSI, which has demonstrated good predictive validity in studies of child abuse potential (Rodriguez & Green, 1997). Internal consistency in the current study was also good (Parental Distress = .82, Parent-Child Dysfunctional Interactions = .81, and Difficult Child = .81). Scores were analyzed continuously.

Traumatic Events Screening Inventory-Parent Report Revised (TESI-P; Ghosh Ippen et al., 2002)—The TESI-P is a 24-item parent-report measure of child exposure to potentially traumatic events. The TESI-P assesses child exposure to a range of traumas (including both experiencing and witnessing and, for some traumas, being confronted with trauma).

Violence Exposure Scale for Children—Revised (VEX-R; Fox & Leavitt, 1995)—The VEX-R was the primary measure of trauma exposure in children. The VEX-R is a 22-item self-report interview of exposure to violence for children ages 6 to 16 years old. Items are represented by cartoon depictions of violence (e.g., a picture of an angry man chasing a

scared man). Media depictions of violence are explicitly excluded. The VEX-R demonstrated good internal consistency and external validity in a sample of low-SES African American children (Shahinfar, Fox, & Leavitt, 2000). In the current study, internal consistency was good (.89).

Traumatic Events Screening Inventory for Children, Version 8.3 (TESI-C; Ribbe, 1996; Ford et al., 2002)—The TESI-C is an 18-item structured clinical interview assessing exposure to potentially traumatic event in children ages 6 to 18 years old. The TESI-C generally corresponds with the TESI-P but does not directly question children regarding exposure to war/terrorism or suicide attempt of someone close, and this study did not include child self-report of sexual abuse or witnessing sexual abuse. The TESI-C was added to the research protocol later than the other measures in the study, resulting in fewer respondents.

UCLA PTSD index for DSM-IV, Parent and Child Versions (UCLA-P and UCLA-C; Rodriguez, Steinberg, & Pynoos, 1999)—The UCLA was the primary measure of PTSD in children for this study. The UCLA is a 21-item (parent-report) and 20-item (child self-report) interview of current (last month) PTSD symptoms in children. The UCLA-P and UCLA-C both yield a total symptom score, subscale scores for re-experiencing, avoidance, and hyperarousal symptoms, and two additional items assessing associated features of PTSD symptom expression in children, specifically self-blame and fear of repeated traumatization. The UCLA has demonstrated good internal consistency, test-retest validity and convergent validity (Steinberg, Brymer, Decker & Pynoos, 2004). In the current study, internal consistency was good for both the parent-report (.89) and child self-report (.87). Scores were analyzed continuously.

Sample, Recruitment, and Procedure

Participants were adult women legal guardians and primary caretakers of at least one child between the age of 8 and 12 years old. Eligibility requirements for all phases of the study included ability to give informed consent. Exclusion criteria for mothers and children included intellectual developmental disorder, active psychosis, neurological disorder, autism spectrum disorder, and profound hearing or vision impairment. In cases of multiple eligible children, mothers were encouraged to choose the youngest eligible child. Written and verbal informed consent were obtained for all adult participants. Mothers also provided written and verbal informed consent for their children to participate, and children 11 years old or older provided written and verbal assent. Children 10 years old and younger provided only verbal assent. All procedures in this study were approved by the Institutional Review Boards of Emory University School of Medicine, Grady Hospital System, and Hughes Spalding Children's Hospital.

Mothers were recruited while waiting in primary care, obstetrical–gynecological (OB/GYN), and diabetes clinics of a large, urban public hospital and an emergency department waiting area of an adjacent pediatric hospital. Recruitment was conducted during normal clinic hours. Participants were approached by a member of the research team and invited to participate in a study examining trauma exposure. Research team members in the emergency

department waiting area did not approach individuals whose children were presenting with injury or life-threatening illness. Data were collected between 2009 and 2014.

Those adults who agreed to participate completed a battery of self-report measures, including the TEI and MPSS, which took 45–75 minutes to complete (largely dependent on the extent of trauma history and symptoms). Due to variable literacy between subjects, all self-report measures were obtained by verbal interview at all study phases. Each participant was paid USD$15 for this initial phase of the study and invited to participate in additional phases, including a 2.5 hour structured clinical interview to assess PTSD and depression (USD$60; see Gillespie et al., 2009 for a description of the structured clinical interview) and a joint visit with her child to assess her child's trauma exposure and symptoms of PTSD, as well as self-report questionnaires related to parenting (USD$80–100 and toy prize).

During this joint visit, mothers and children were interviewed in separate rooms. This visit lasted 2–3 hours. Mothers completed the CAPI, PSI, TESI-P, and UCLA-P and children completed the VEX-R, TESI-C, and UCLA-C. Data presented in the current study were collected during the initial visit and the joint mother-child visit.

Data Analysis

Hierarchical multiple regressions were performed to examine the contributions of maternal lifetime trauma exposure and maternal current PTSD symptoms in predicting 1) CAPI Child Abuse Potential, 2) PSI Parental Distress, 3) PSI Difficult Child, and 4) PSI Dysfunctional Parent-Child Interactions. Additional hierarchical multiple regressions were performed to examine the contribution of maternal trauma and PTSD symptoms, CAPI Child Abuse Potential, child age and sex, and child self-report of trauma in predicting child self-report of current PTSD symptoms. One analysis was based on the VEX-R, and another was based on the TESI-C.

Results

Demographics

The study included 112 mother-child dyads, including 50 girls and 62 boys (see Table 1). The majority of women identified as African-American and reported at least a high school education and a household monthly income less than US$1000. The majority were biological mothers with legal guardianship. The remaining were biological relatives with legal guardianship. Legal guardianship by non-biologically-related parents was not an exclusion. All women in the study are referred to as mothers. The mean number of minors in the household was 2.98 (SD = 1.85, range: 1–11), and the mean number of adults was 1.82 (SD = .98, range: 1–6).

Trauma Exposure and PTSD Symptoms

Mothers—Nearly all mothers in this sample (97.32%) reported experiencing at least one type of trauma. Mothers reported high rates childhood maltreatment, including physical (25.89%) and sexual (58.93%) abuse, and witnessing violence between parents (47.32%). Mothers also reported high rates of adult exposure, including being attacked by a spouse or

intimate partner (53.57%). Maternal trauma was significantly positively correlated with maternal PTSD symptoms (see Table 2).

Children—On the VEX-R and TESI-C, children reported exposure to a range of different kinds of family and community trauma (see Tables 3 and 4). Both the VEX-R and TESI-C were significantly positively associated with child self-report of PTSD symptoms on the UCLA-C. Relative to girls, boys reported more frequent exposure to violence on the VEX-R, $M = 19.09$, $SD = 1.42$ vs. $M = 14.91$, $SD = 1.19$, $t(109.49) = 2.26$, $p < .05$. There was no difference in self-reported trauma on the TESI-C. Boys and girls did not differ in terms of or self-reported PTSD.

The TESI-C was added to the research protocol later than the other measures in the study, resulting in fewer respondents for the TESI-C (112 vs. 68). Compared to children who did not complete the TESI-C, children who did complete the TESI-C had mothers who reported lower PTSD symptoms, $M = 14.12$, $SD = 12.05$ vs. $M = 19.49$, $SD = 14.32$, $t(110) = 2.14$, $p < .05$. No other group differences were observed for child or maternal demographics, child or maternal trauma exposure, or parenting variables.

Convergence of Parent-report and Child Self-report of Child Trauma Exposure and PTSD

Parent-report of child trauma on the TESI-P differed from child self-report on the TESI-C in notable ways, including that children tended to report more exposure to natural disaster, less separation from family, and more witnessing serious verbal altercations/threats within the family. Nevertheless, as shown in Table 2, the TESI-C and TESI-P were significantly positively correlated. Parent- and child self-report of PTSD symptoms on the UCLA-P and UCLA-C were unrelated. Parent-report of child trauma on the TESI-P and parent-report of child PTSD on the UCLA-P were, however, significantly positively correlated with mothers' self-report of trauma exposure and PTSD symptoms. On the TESI-P, mothers reported more types of trauma exposure for boys than for girls, $M = 7.14$, $SD = 3.83$ vs. $M = 5.69$, $SD = 2.59$, $t(107.01) = 2.37$, $p < .05$. No difference was observed between boys and girls for parent-reported child PTSD symptoms.

Maternal Trauma, PTSD, and Parenting

Maternal trauma was significantly positively associated with child abuse potential, parental distress, and perceptions of having a difficult child, but not with dysfunctional parent-child interactions. Maternal PTSD symptoms were significantly positively associated with child abuse potential and all three PSI subscales. In a hierarchical multiple regression predicting child abuse potential (see Table 5), both maternal trauma and PTSD symptoms significantly predicted increased child abuse potential, even accounting for the CAPI Faking Good Validity Index.

A hierarchical multiple regression predicting parental distress demonstrated that maternal trauma significantly predicted increased parental distress, even accounting for the PSI Defensive Responding Index, but when maternal PTSD was included, only PTSD, and not trauma, predicted increased distress. In separate hierarchical multiple regressions predicting dysfunctional parent-child interactions and perceptions of having a difficult child, neither

trauma nor PTSD were significant predictors when accounting for the PSI Defensive Responding Index.

Relationship of Maternal Trauma, PTSD, and Parenting to Child Trauma and PTSD

Maternal trauma was significantly positively associated with child self-report of trauma on the TESI-C, but not the VEX-R, and with child self-report of PTSD symptoms on the UCLA-C (see Table 2). Maternal PTSD, however, was not associated with child self-report of trauma on either the VEX-R or the TESI-C or with child self-report of PTSD symptoms on the UCLA-C.

Child Abuse Potential—Child abuse potential was not associated with child self-report of trauma on either the TESI-C or the VEX-R but was significantly positively associated with child self-report of PTSD symptoms on the UCLA-C. In a hierarchical multiple regression predicting child self-report of PTSD on the UCLA-C, when child age, child sex, maternal trauma, maternal PTSD, maternal child abuse potential, and child self-report of violence exposure on the VEX-R were included, only child abuse potential and child self-report of violence exposure on the VEX-R were significant predictors of increased child self-report of PTSD symptoms (see Table 6).

A separate hierarchical multiple regression based on the subsample of children who completed the TESI-C yielded nearly identical results. Only child abuse potential ($B = .04$, $SE = .02$, $\beta = .29$, $p < .05$) and child self-report of trauma on the TESI-C ($B = 2.54$, $SE = .58$, $\beta = .49$, $p < .01$) significantly predicted increased child self-report of PTSD symptoms.

Parental Distress—Parental distress was significantly positively associated with child self-report of trauma on the TESI-C, but no other associations were observed between PSI subscales and child self-report of trauma or PTSD. Hierarchical multiple regression models that included parental distress instead of child abuse potential (based separately on the VEX-R or the TESI-C) demonstrated no association of parental distress to child self-report of PTSD symptoms.

Discussion

This study examined rates of and associations among trauma, PTSD, and problematic parenting in a community sample of low-income, primarily African-American mothers and children recruited from outpatient primary care, diabetes, and OB/GYN clinics of an urban public hospital and an emergency department waiting area of a pediatric hospital. We found that maternal trauma and PTSD both significantly predicted child abuse potential. Maternal trauma predicted parental distress but was better explained by maternal PTSD. Maternal trauma and PTSD did not predict dysfunctional parent-child interactions or perceptions of a difficult child.

The finding that maternal trauma and PTSD predicted child abuse potential is supported by studies of intergenerational patterns of abuse (Milner et al., 2010; Smith, Cross, Winkler, Jovanovic, & Bradley, 2014). Trauma and PTSD may contribute to parental anger, impulsivity, and emotion regulation problems (DiLillo, Tremblay, & Peterson, 2000; Smith

et al., 2014), increasing frequency of negative interactions with one's child and exhausting psychological resources to moderate one's responses to those interactions (Bridgett, Burt, Edwards, & Deater-Deckard, 2015; Milner et al., 2010). Maternal PTSD may also increase children's risk of exposure to traumatic events broadly (Chemtob, Gudiño, & Laraque, 2013; Roberts et al., 2012), possibly due to an association of parental PTSD to family instability (Kessler, 2000), which mirrors the association in the current study of mothers' self-report of PTSD and parent-report of children's overall trauma. In the current study, maternal PTSD was not associated with children's self-reported trauma. Findings in Chemtob et al. (2013) were based on parent-report of child trauma and in Roberts et al. (2012) on self-report of trauma in adult offspring, suggesting that the absence of an association between maternal self-report of PTSD and child self-report of trauma in the current study could be due in part to differences respondents or child age.

The finding that maternal PTSD was associated with increased parental distress is also consistent with a number of studies (Berz et al., 2008; McDonald et al., 2011). PTSD symptoms may limit positive emotional experiences with one's child and increase worry about being able to protect one's child from harm. Parental distress did not, however, predict child self-reported PTSD symptoms. In a sample of African-American and Latino children, parental distress mediated the relationship between child trauma and internalizing—but not externalizing—problems (Whitson et al., 2014). Parental distress may be associated more narrowly with children's internalizing problems, perhaps due to an association with modeling parental negative affect (Goodman & Gotlib, 1999), and PTSD in children is associated with both internalizing and externalizing behaviors (Javdani, Abdul-Adil, Suarez, Nichols, & Farmer, 2014).

Maternal child abuse potential and child self-report of trauma, but not maternal trauma or PTSD, significantly predicted child self-report of PTSD. These findings echo findings in other studies of serious negative consequences of exposure to childhood maltreatment and violence (Margolin & Gordis, 2000). Importantly, we found high rates of trauma exposure in both children and mothers relative to the general population. In a nationally-representative sample of adults, rates of lifetime trauma exposure ranged from 66.38 to 83.66% with 76.37% of African Americans reporting at least one exposure (Roberts, Gilman, Breslau, Breslau, & Koenen, 2011). In the current study sample, 97.32% of adult women reported at least one type of traumatic exposure, with average of over five types of trauma per individual, including community and family violence, and every child in the study self-reported exposure to at least one trauma type.

This study highlights a need for families' access to relevant interventions. Mental health providers more often with either a parent or child, less often with both. Though parent-focused interventions can decrease harsh punishment and increase positive parenting, and child-focused interventions can reduce trauma-related distress, parent-child integrated treatment approaches may be more effective (Runyon, Deblinger, Ryan, & Thakkar-Kolar, 2004). Integrated treatments, such as Parent-Child Cognitive-Behavioral Therapy for Families at Risk for Child Physical Abuse (CPA-CBT) and Parent-Child Interaction Therapy (PCIT), decrease parental harsh discipline and increase positive parenting, and CPA-CBT may decrease child PTSD symptoms (Kjellgren, Svedin, & Nilsson, 2013). Improving

access to integrated treatments in low-SES communities (e.g., through home-based delivery, Gresl, Fox, & Fleischmann, 2014) represents an opportunity to interrupt intergenerational trauma-related mental health risk.

This study is not without limitations. Because data are cross-sectional, no interpretations of causality or temporal primacy of trauma and PTSD relative to development of problematic parenting. Self-report bias may also impact findings. Participants likely minimize problematic or abusive parenting (Morsbach, & Prinz, 2006), though we were careful to include available validity indices in the analysis to account for this minimization. Participants may also be prone to underreporting trauma, particularly childhood maltreatment (Widom & Shepard, 1996).

Another limitation is the relatively weak association between parent-report and child self-report of PTSD symptoms. Mothers' reports of children's PTSD symptoms were more associated with self-reports of their own PTSD symptoms than children's self-reports. Such a finding is hardly unusual and is in line with many studies that include both parent and child respondents (Copeland, Keeler, Adrian-Angold, Costello, 2007; Meiser-Stedman, Smith, Glucksman, Yule, & Dalgleish, 2007). Parents have more difficulty reporting on unobservable child symptoms (e.g., intrusive recollection) and are influenced by their own experiences. This discrepancy represents an ongoing challenge in research, as well as in practice. Nevertheless, child self-report PTSD, but not parent-report, is associated with child physiological reactivity, suggesting greater utility of child-reported symptoms in predicting distress (Gamwell et al., 2015).

Despite these limitations, this study is potentially the first to examine trauma and PTSD with both mothers and children within a low-income, primarily African-American sample and demonstrates the importance of maternal trauma and PTSD to problematic parenting, particularly child abuse potential, and the association of child abuse potential with children's PTSD, even accounting for children's other traumatic experiences. Even so, children's exposure to overall trauma remained a significant risk factor for PTSD. Child or family interventions should consider trauma and mental health factors for both parents and children.

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References

Abidin, RR. Parenting Stress Index: (Short Form). Pediatric Psychology Press; 1990.

Alink LR, Cicchetti D, Kim J, Rogosch FA. Longitudinal associations among child maltreatment, social functioning, and cortisol regulation. Developmental Psychology. 2012; 48(1):224. [PubMed: 21823793]

Berz JB, Taft CT, Watkins LE, Monson CM. Associations between PTSD symptoms and parenting satisfaction in a female veteran sample. Journal of Psychological Trauma. 2008; 7(1):37–45.

Breslau N, Chilcoat HD, Kessler RC, Davis GC. Previous exposure to trauma and PTSD effects of subsequent trauma: results from the Detroit Area Survey of Trauma. 2014

Bridgett DJ, Burt NM, Edwards ES, Deater-Deckard K. Intergenerational transmission of self-regulation: A multidisciplinary review and integrative conceptual framework. Psychological Bulletin. 2015; 141(3):602. [PubMed: 25938878]

Caliso JA, Milner JS. Childhood history of abuse and child abuse screening. Child Abuse & Neglect. 1992; 16(5):647–659. [PubMed: 1393725]

Chemtob CM, Gudiño OG, Laraque D. Maternal posttraumatic stress disorder and depression in pediatric primary care: association with child maltreatment and frequency of child exposure to traumatic events. JAMA Pediatrics. 2013; 167(11):1011–1018. [PubMed: 23999612]

Cohen LR, Hien DA, Batchelder S. The impact of cumulative maternal trauma and diagnosis on parenting behavior. Child Maltreatment. 2008; 13(1):27–38. [PubMed: 18174346]

Dias A, Sales L, Cardoso RM, Kleber R. Childhood maltreatment in adult offspring of Portuguese war veterans with and without PTSD. European Journal of Psychotraumatology. 2014; 5

DiLillo D, Tremblay GC, Peterson L. Linking childhood sexual abuse and abusive parenting: The mediating role of maternal anger. Child Abuse & Neglect. 2000; 24(6):767–779. [PubMed: 10888017]

Field NP, Muong S, Sochanvimean V. Parental styles in the intergenerational transmission of trauma stemming from the Khmer Rouge regime in Cambodia. American Journal of Orthopsychiatry. 2013; 83(4):483–494. [PubMed: 24164520]

Fitzpatrick KM, Boldizar J. The prevalence and consequences of exposure to violence among African American youth. Journal of the American Academy of Child and Adolescent Psychiatry. 1993; 32(2):424– 430. [PubMed: 8444774]

Ford, JD., Racusin, R., Rogers, K., Ellis, C., Schiffman, J., Ribbe, D., … Edwards, J. Traumatic Events Screening Inventory for Children (TESI-C) Version 8.4. National Center for PTSD and Dartmouth Child Psychiatry Research Group; Dartmouth VT: 2002.

Fox, NA., Leavitt, LA. The Violence Exposure Scale for Children-Revised (VEX-R). College Park: Institute for Child Study, University of Maryland; 1995.

Gamwell K, Nylocks M, Cross D, Bradley B, Norrholm SD, Jovanovic T. Fear conditioned responses and PTSD symptoms in children: Sex differences in fear-related symptoms. Developmental Psychobiology. 2015

Ghosh Ippen, C., Ford, J., Racusin, R., Acker, M., Bosquet, K., Rogers, C., Edwards, J. Trauma Events Screening Inventory-Parent Report Revised. San Francisco: The Child Trauma Research Project of the Early Trauma Network and The National Center for PTSD Dartmouth Child Trauma Research Group; 2002.

Gillespie CF, Bradley B, Mercer K, Smith AK, Conneely K, Gapen M, … Ressler KJ. Trauma exposure and stress-related disorders in inner city primary care patients. General Hospital Psychiatry. 2009; 31:505–514. [PubMed: 19892208]

Goodman SH, Gotlib IH. Risk for psychopathology in the children of depressed mothers: a developmental model for understanding mechanisms of transmission. Psychological Review. 1999; 106(3):458. [PubMed: 10467895]

Gresl BL, Fox RA, Fleischmann A. Home-based parent-child therapy in low-income African American, Caucasian, and Latino families: A comparative examination of treatment outcomes. Child & Family Behavior Therapy. 2014; 36(1):33–50.

Javdani S, Abdul-Adil J, Suarez L, Nichols SR, Farmer AD. Gender differences in the effects of community violence on mental health outcomes in a sample of low-income youth receiving psychiatric care. American Journal of Community Psychology. 2014; 53(3–4):235–248. [PubMed: 24496719]

Jovanovic T, Smith A, Kamkwalala A, Poole J, Samples T, Norrholm SD, … Bradley B. Physiological markers of anxiety are increased in children of abused mothers. Journal of Child Psychology and Psychiatry. 2011; 52(8):844–852. [PubMed: 21501167]

Kalebić Jakupčević K, Ajduković M. Risk factors of child physical abuse by parents with mixed anxiety-depressive disorder or posttraumatic stress disorder. Croatian Medical Journal. 2011; 52(1):25–34. [PubMed: 21328717]

Kennedy SC, Kim JS, Tripodi SJ, Brown SM, Gowdy G. Does Parent–Child Interaction Therapy reduce future physical abuse? A meta-analysis. Research on Social Work Practice. 2016; 26(2): 147–156.

Kessler RC. Posttraumatic stress disorder: the burden to the individual and to society. The Journal of Clinical Psychiatry. 2000; 61(5):4–14.

Kjellgren C, Svedin CG, Nilsson D. Child physical abuse—Experiences of combined treatment for children and their parents: A pilot study. Child Care in Practice. 2013; 19(3):275–290.

Lang AJ, Gartstein MA, Rodgers CS, Lebeck MM. The impact of maternal childhood abuse on parenting and infant temperament. Journal of Child and Adolescent Psychiatric Nursing. 2010; 23(2):100–110. [PubMed: 20500626]

Margolin G, Gordis EB. The effects of family and community violence on children. Annual Review of Psychology. 2000; 51(1):445–479.

McDonald S, Slade P, Spiby H, Iles J. Post-traumatic stress symptoms, parenting stress and mother-child relationships following childbirth and at 2 years postpartum. Journal of Psychosomatic Obstetrics & Gynecology. 2011; 32(3):141–146. [PubMed: 21824044]

Milner JS. Assessing physical child abuse risk: The Child Abuse Potential Inventory. Clinical Psychology Review. 1994; 14(6):547–583.

Milner JS, Thomsen CJ, Crouch JL, Rabenhorst MM, Martens PM, Dyslin CW, … Merrill LL. Do trauma symptoms mediate the relationship between childhood physical abuse and adult child abuse risk? Child Abuse & Neglect. 2010; 34(5):332–344. [PubMed: 20359748]

Morsbach SK, Prinz RJ. Understanding and improving the validity of self-report of parenting. Clinical Child and Family Psychology Review. 2006; 9(1):1–21. [PubMed: 16636897]

Qouta S, Punamaki R, El Sarraj E. Mother–child expression of psychological distress in war trauma. Clinical Child Psychology and Psychiatry. 2005; 10:135–156.

Ressler KJ, Mercer KB, Bradley B, Jovanovic T, Mahan A, Kerley K, … May V. Post-traumatic stress disorder is associated with PACAP and the PAC1 receptor. Nature. 2011; 470:492–497. [PubMed: 21350482]

Ribbe, D. Psychometric review of Traumatic Event Screening Instrument for Children (TESI-C). In: Stamm, BH., editor. Measurement of Stress, Trauma, and Adaptation. Lutherville, MD: Sidran Press; 1996. p. 386-387.

Roberts AL, Galea S, Austin SB, Cerda M, Wright RJ, Rich-Edwards JW, Koenen KC. Posttraumatic stress disorder across two generations: Concordance and mechanisms in a population-based sample. Biological Psychiatry. 2012; 72(6):505–511. [PubMed: 22521146]

Roberts AL, Gilman SE, Breslau J, Breslau N, Koenen KC. Race/ethnic differences in exposure to traumatic events, development of post-traumatic stress disorder, and treatment-seeking for post-traumatic stress disorder in the United States. Psychological Medicine. 2011; 41(1):71–83. [PubMed: 20346193]

Rodriguez CM, Green AJ. Parenting stress and anger expression as predictors of child abuse potential. Child Abuse & Neglect. 1997; 21(4):367–377. [PubMed: 9134265]

Rodriguez, N., Steinberg, A., Pynoos, RS. UCLA PTSD Index for DSM IV Instrument Information: Child Version, Parent Version, Adolescent Version. Los Angeles: UCLA Trauma Psychiatry Services; 1999.

Runyon MK, Deblinger E, Ryan EE, Thakkar-Kolar R. An overview of child physical abuse developing an integrated parent-child cognitive-behavioral treatment approach. Trauma, Violence, & Abuse. 2004; 5(1):65–85.

Ruscio AM, Weathers FW, King LA, King DW. Male war-zone veterans' perceived relationships with their children: The importance of emotional numbing. Journal of Traumatic Stress. 2002; 15(5): 351–357. [PubMed: 12392222]

Schaeffer CM, Alexander PC, Bethke K, Kretz LS. Predictors of child abuse potential among military parents: Comparing mothers and fathers. Journal of Family Violence. 2005; 20(2):123–129.

Shahinfar A, Fox NA, Leavitt LA. Preschool children's exposure to violence: relation of behavior problems to parent and child reports. American Journal of Orthopsychiatry. 2000; 70(1):115. [PubMed: 10702856]

Smith AL, Cross D, Winkler J, Jovanovic T, Bradley B. Emotional dysregulation and negative affect mediate the relationship between maternal history of child maltreatment and maternal child abuse potential. Journal of Family Violence. 2014; 29(5):483–494.

Smith P, Perrin S, Yule W, Rabe-Hesketh S. War exposure and maternal reactions in the psychological adjustment of children from Bosnia-Hercegovina. Journal of Child Psychology and Psychiatry. 2001; 42(3):395–404. [PubMed: 11321208]

Steinberg AM, Brymer M, Decker K, Pynoos RS. The UCLA PTSD Reaction Index. Current Psychiatry Reports. 2004; 6:96–100. [PubMed: 15038911]

Thabet AA, Ibraheem AN, Shivram R, Winter EA, Vostanis P. Parenting support and PTSD in children of a war zone. International Journal of Social Psychiatry. 2009; 55(3):226–237. [PubMed: 19383666]

Thakar D, Coffino B, Lieberman AF. Maternal Symptomatology and Parent–Child Relationship Functioning in a Diverse Sample of Young Children Exposed to Trauma. Journal of Traumatic Stress. 2013; 26(2):217–224. [PubMed: 23529875]

Valentino K, Berkowitz S, Stover CS. Parenting behaviors and posttraumatic symptoms in relation to children's symptomatology following a traumatic event. Journal of Traumatic Stress. 2010; 23(3): 403–407. [PubMed: 20564374]

Whitson ML, Bernard S, Kaufman JS. The mediating role of parenting stress for children exposed to trauma: Results from a school-based system of care. Journal of Child and Family Studies. 2014:1–11.

Widom CS, Shepard RL. Accuracy of adult recollections of childhood victimization: Part 1. Childhood physical abuse. Psychological Assessment. 1996; 8(4):412.

Table 1

Maternal Demographic Characteristics (N = 112)

	***N* Endorsed**	**% Endorsed**
Self-identified ethnicity/race		
African American, Non-Hispanic	107	95.54
All other ethnicity/race	5	4.46
Highest Grade Completed		
Less than 12th Grade	28	25.00
High school graduate/GED	32	28.57
Some college or more	52	46.43
Household Monthly Income		
$0 – 499	26	23.21
$500 – 999	33	29.46
$1000 or more	51	45.54
Parental Status		
Biological Parent and Legal Guardian	102	91.07
Other Biological Relative and Legal Guardian	10	8.93

Table 2

Relationships among Trauma Exposure, PTSD, and Parenting in Mothers and Children

		N	*M*	*SD*	1	2	3	4	5	6	7	8	9	10
1	TEI	112	5.62	3.42	-									
2	MPSS	112	16.23	13.19	.53***	-								
3	CAPI	112	186.15	103.67	.49***	.57***	-							
4	PSI_{Dist}	112	29.15	7.44	.34***	.37***	.64***	-						
5	PSI_{DiffCh}	112	32.61	7.47	.23*	.19*	.44***	.51***	-					
6	PSI_{DysInt}	112	25.99	7.15	.13	.22*	.46***	.63***	.57	-				
7	VEX-R	112	17.22	10.21	.17	.10	.15	.11	.06	−.03	-			
8	TESI-C	68	5.31	2.77	.35**	.11	.24	.25*	.16	.13	.70***	-		
9	UCLA-C	112	21.83	14.38	.19*	.13	.31**	.17	.13	.17	.46***	.52***	-	
10	TESI-P	112	6.49	3.40	.56***	.35***	.31**	.27**	.21*	.06	.16	.24*	-.02	-
11	UCLA-P	112	17.35	12.62	.46***	.46***	.46***	.42***	.51***	.28**	.22*	.22	.07	.46***

Note: TEI = *Traumatic Events Inventory*, MPSS = *Modified PTSD Symptom Scale*; CAPI = *Child Abuse Potential Inventory*; PSI = *Parenting Stress Index* (Dist = distress, DiffCh = difficult child, DysInt = dysfunctional interactions); TESI = *Traumatic Events Screening Inventory for Children-Parent Report (P) and Child Self-Report (C)*; VEX-R = *Violence Exposure Scale for Children—Revised*; UCLA = *UCLA PTSD index for DSM-IV, Parent (P) and Child (C) Versions;*

* $p < .05$,

** $p < .01$,

*** $p < .001$

Table 3

Self-Report of Exposure to Violence in Children Based on the VEX-R (N = 112)

Traumatic Events	***N***	**%**
Experienced		
Yelled At	88	78.57
Thrown At	38	33.93
Pushed	39	34.82
Chased in Anger	31	27.68
Slapped	25	22.32
Beaten Up	19	16.96
Stolen From	35	31.25
Directly Threatened with Weapon	2	1.79
Spanked	86	76.79
Witnessed		
Someone Yelled At	99	88.39
Someone Thrown At	61	54.46
Someone Pushed	73	65.18
Someone Chased in Anger	42	37.50
Someone Slapped	46	41.07
Someone Beaten Up	83	74.11
Someone Stolen From	35	31.25
Someone Directly Threatened with Weapon	17	15.18
A Child Spanked	82	73.21
Someone Stabbed	7	6.25
Someone Shot	10	8.93
Someone Arrested	90	80.36
Someone Dealing Drugs	22	19.65

Table 4

Parent-Report and Child Self-report of Lifetime Traumatic Events in Children Based on the TESI-P (N = 112) and TESI-C (N = 68)

	Parent-report		Child Self-report	
Traumatic Events	***N***	**%**	***N***	**%**
Experienced				
Serious accident or injury	25	22.32	20	29.41
Natural disaster	6	5.36	18	26.47
Serious medical procedures or illness	59	52.68	14	20.59
Separation from parent/caregiver	50	44.64	10	14.71
Physical assault	31	27.68	9	13.24
Threat of serious physical harm	11	9.82	13	19.12
Mugging	9	8.04	7	10.29
Animal attack	13	11.61	10	14.71
Sexual abuse	9	8.04		
Emotional abuse	18	16.07		
Physical neglect	15	13.39		
Witnessed				
Serious accident or injury	14	12.50	31	45.59
Physical assault within family	38	33.93	16	23.53
Serious verbal altercations within family	24	21.43	31	45.59
Physical assault outside of family	47	41.97	31	45.59
Serious verbal altercations outside of family	29	25.89	26	38.24
Family member arrested[1]	35	31.25	38	55.89
Sexual abuse	1	.89		
Someone close to child died, any cause	74	66.07		
Someone close to child died due to violence	12	10.71		

[1] Child self-report of family arrest includes both witnessing and knowing about arrest

Table 5

Hierarchical Multiple Regressions Predicting Child Abuse Potential and Parental Distress

	Model 1		Model 2		Model 3	
	B (*SE B*)	***β***	**B (*SE B*)**	***β***	**B (*SE B*)**	***β***
DV: Child Abuse Potential						
Faking Good Validity Index	−36.78 (19.69)	−.18	−31.82 (17.27)	−.15	−31.61 (15.70)	−.15
Maternal Lifetime Trauma			14.64 (2.50)	.48***	7.68 (2.68)	.25**
Maternal Current PTSD Symptoms					3.39 (.69)	.43***
R^2_{Model}	.03		.26		.40	
F_{Model}	3.49		19.44***		23.65***	
DV: Parental Distress						
Defensive Responding Index	−13.14 (3.18)	−.37***	−11.64 (3.06)	−.33***	−10.76 (3.04)	−.30***
Maternal Lifetime Trauma			.65 (.19)	.30***	.40 (.21)	.19
Maternal Current PTSD Symptoms					.12 (.06)	.22*
R^2_{Model}	.13		.22		.25	
F_{Model}	17.07***		15.42***		12.25***	

Note: B = Unstandardized regression coefficient, β = Standardized regression coefficient;

*$p < .05$,

**$p < .01$,

***$p < .001$

Table 6

Hierarchical Multiple Regressions Predicting Child Self-Report PTSD Symptoms

	Model 1		Model 2		Model 3		Model 4	
	B (*SE B*)	***β***	**B (*SE B*)**	***β***	**B (*SE B*)**	***β***	**B (*SE B*)**	***β***
DV: Child Self-Report PTSD								
Child Age	.27 (.95)	.03	−.03 (.98)	−.003	.23 (.96)	.02	−1.16 (.89)	−.12
Child Sex	1.39 (2.78)	.05	2.25 (2.78)	.08	1.99 (2.70)	.07	4.17 (2.43)	.14
Maternal Lifetime Trauma			.72 (.47)	.17	.37 (.48)	.09	.11 (.43)	.03
Maternal Current PTSD Symptoms			.06 (.13)	.05	−.10 (.14)	−.09	−.02 (.12)	−.02
Maternal Child Abuse Potential					.04 (.02)	.32**	.04 (.01)	.25*
Child Violence Exposure (VEX-R)							.68 (.12)	.48***
R^2	.003		.04		.11		.30	
F model	.15		1.18		2.49*		7.64***	

Note: B = Unstandardized regression coefficient, β = Standardized regression coefficient; VEX-R = *Violence Exposure Scale for Children—Revised*;

* $p < .05$,

** $p < .01$,

*** $p < .001$