UC Riverside

UC Riverside Previously Published Works

Title

Mothers History of Child Sexual Abuse and Child Behavior Problems: The Mediating Role of Mothers Helpless State of Mind.

Permalink

https://escholarship.org/uc/item/619427h5

Journal

Child Maltreatment, 23(4)

Authors

Linde-Krieger, Linnea Yates, Tuppett

Publication Date

2018-11-01

DOI

10.1177/1077559518775536

Peer reviewed

Published in final edited form as:

Child Maltreat. 2018 November; 23(4): 376–386. doi:10.1177/1077559518775536.

Mothers' History of Child Sexual Abuse and Child Behavior Problems: The Mediating Role of Mothers' Helpless State of Mind

Linnea Linde-Krieger¹, Tuppett M. Yates¹

¹Department of Psychology, University of California, Riverside, CA, USA

Abstract

This investigation evaluated a theoretically specified model of associations among mothers' history of child sexual abuse (CSA), a helpless state of mind (SOM) with regard to the mother-child relationship, and increased behavior problems in the next generation. Moreover, we evaluated the moderating influence of child gender on predicted relations between mothers' CSA severity and helpless SOM (i.e., moderated mediation). Participants were 225 biological motherpreschooler dyads (48% female; 46.4% Latinx) drawn from an ongoing, longitudinal study of representation and regulation in child development. Mothers' history of CSA was assessed when their children were 4 years old and emerged as a prominent risk factor in this diverse, high-risk community sample with 40% of mothers reporting contact-based sexual abuse prior to age 18. Mediation analyses revealed a significant indirect pathway from a continuous rating of mothers' CSA severity to increased externalizing behavior problems from ages 4 to 8 in the next generation via mothers' helpless SOM at age 6. Further, this indirect path was significant for motherdaughter dyads, but not for mother-son dyads. This investigation contributes to the neophyte literature on intergenerational CSA effects by revealing the impact of a mother's CSA history on her SOM regarding the mother-child relationship, particularly when parenting daughters. Clinical interventions that enhance survivors' awareness of and reflection on their SOM regarding the parent-child relationship may attenuate intergenerational CSA effects on child adaptation.

Keywords

child sexual abuse; child behavior problems; helpless state of mind; intergenerational transmission; moderated mediation

A history of child sexual abuse (CSA) is associated with a variety of maladaptive outcomes among adult survivors (e.g., depression, anxiety, and self-injurious behavior; see Hillberg, Hamilton-Giachritsis, & Dixon, 2011, for review). Relative to the robust literature documenting the impact of CSA on survivors' emotional and behavioral adjustment, less

Article reuse guidelines: sagepub.com/journals-permissions

Corresponding Author: Linnea Linde-Krieger, Department of Psychology, University of California, 900 University Avenue, Riverside, CA 92521, USA. linnea.linde@email.ucr.edu.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

attention has been directed to the intergenerational effects of CSA. Apart from theoretical and empirical considerations of intergenerational transmission patterns of maltreatment (Berzenski, Yates, & Egeland, 2014; Oates, Tebbutt, Swanston, Lynch, & O'Toole, 1998), little is known about if and how a history of CSA may influence adjustment in the next generation. This investigation sought to address this gap in the literature by evaluating a theoretically specified model, in which we hypothesized that mothers' reported history of CSA would be associated with elevated child behavior problems from ages 4 to 8, and this relation would be accounted for by mothers' helpless state of mind (SOM) regarding the parent—child relationship. Moreover, given the gendered nature of both CSA (Whittier, 2016) and parents' perceptions of their child (Raley & Bianchi, 2006), we evaluated the moderating influence of child gender on the predicted relation between mothers' history of CSA and helpless SOM regarding the parent—child relationship (i.e., moderated mediation).

Incidence and Effects of CSA

Worldwide, rates of CSA are alarmingly high (Barth, Bermetz, Heim, Trelle, & Tonia, 2013). Recent reports indicate that over 25% of girls and 5% of boys in the United States experience forced or unwanted sexual contact (i.e., CSA) before the age of 18 (Finkelhor, Shattuck, Turner, & Hamby, 2014). Mirroring the gendered exposure to CSA in the population, the research literature has focused primarily on girls. Among girls, CSA is associated with negative social, emotional, behavioral, and physiological effects in both cross-sectional and prospective research designs (e.g., Lewis, McElroy, Harlaar, & Runyan, 2016; Noll et al., 2017). CSA also predicts difficulties in women's later relationships with friends (Sperry & Widom, 2013), partners (Liang, Williams, & Siegel, 2006), and, though less studied, offspring (DiLillo & Damashek, 2003).

Mothering and Child Adjustment in the Wake of CSA

Studies examining the effects of mothers' history of CSA on later parenting have yielded equivocal results. Qualitative research studies exploring the experience of motherhood among survivors of CSA reveal increased feelings of fear and doubt about parenting capacities, such that many survivors report a desire to avoid motherhood entirely (Herman, 1981). More recent studies indicate that CSA survivors often describe parenting as stressful, especially with regard to managing traumatic triggers within the parent–child relationship, establishing effective parent–child boundaries, and balancing emotional closeness with healthy limit setting (e.g., Schuetze & Eiden, 2005; Wright, Fopma-Loy, & Oberle, 2012). However, a sizable minority of survivors report positive expectations and experiences parenting their own children (Wright et al., 2012). Further, W. Cross (2001) found that mothers with a history of CSA were highly reflective about their parenting practices and deeply concerned with safeguarding their children from abuse.

Quantitative data suggest that mothers with a history of CSA endorse negative feelings about themselves as parents, low perceived confidence in parenting, and decreased feelings of control and satisfaction in the parenting role (Banyard, 1997). A history of CSA has also been associated with problematic parenting behaviors including anger and hostility (e.g., DiLillo, Tremblay, & Peterson, 2000; Pasalich, Cyr, Zheng, McMahon, & Spieker, 2016),

harsh physical discipline (e.g., Banyard, 1997; Zuravin & Fontanella, 1999), difficulties maintaining parent—child boundaries (e.g., Alexander, Teti, & Anderson, 2000), parental withdrawal and emotional detachment (e.g., Roberts, O'Connor, Dunn, Golding, & Team, 2004), and heightened abuse potential/perpetration (e.g., Cohen, Hien, & Batchelder, 2008). However, other studies find that mothers report minimal parenting stress and effective parenting practices in the wake of their own CSA (e.g., Renner, Whitney, & Easton, 2015). Moreover, some evidence suggests that self-reported deficits in parenting competence among mothers with CSA histories are not related to observed parenting (Bailey, DeOliveira, Wolfe, Evans, & Hartwick, 2012). For example, Fitzgerald, Shipman, Jackson, McMahon, and Hanley (2005) found that female incest survivors reported less parenting self-efficacy than nonabused mothers, yet, in observed parent—child interactions, these same mothers evidenced moderate to high levels of support, assistance, and confidence, and their children displayed high levels of affection.

Not surprisingly, data regarding the adaptation of children born to mothers with a history of CSA are similarly variable. Despite some studies showing positive relations of maternal sexual and physical abuse with infant distress (Lyons-Ruth & Block, 1996) and school-aged children's behavior problems (Pasalich et al., 2016), other research shows no significant effect of mothers' CSA history on children's behavioral or emotional adjustment (Alexander et al., 2000). Indeed, in a study of sexually abused children, children of CSA survivors were *less* likely than were the children of nonabused women to experience post-traumatic stress disorder symptoms (Timmons-Mitchell, Chandler-Holtz, & Semple, 1998).

Mixed evidence regarding the intergenerational effects of CSA warrants consideration of factors that may explain when and why CSA undermines positive development in the next generation. Across maltreatment types, a history of childhood victimization has been shown to indirectly affect the behavioral outcomes of survivors' children through hostile or aggressive parenting (Neppl, Conger, Scaramella, & Ontai, 2009), which is a robust risk factor for both child externalizing problems, such as aggression and delinquency, and child internalizing problems, such as depression and anxiety (Rijlaarsdam et al., 2014). Among survivors of CSA, emotional detachment from one's child, difficulty establishing appropriate boundaries, and parenting behaviors that are either overly permissive or excessively controlling may also contribute to behavior problems in the next generation (see DiLillo & Damashek, 2003, for review). In addition to direct parenting behaviors, maternal distress (Pasalich et al., 2016), depression (Schuetze & Eiden, 2005), anxiety (Roberts et al., 2004), anger (DiLillo et al., 2000), and dissociation (Collin-Vezina, Cyr, Pauze, & McDuff, 2005) have been identified as possible mediators of relations between a maternal history of CSA and child adjustment outcomes.

A Helpless SOM as a Mediator of Intergenerational CSA Effects

Attachment theory suggests that a parent's SOM regarding the parent—child relationship encompasses prototypes for processing attachment-related thoughts, feelings, and memories that are relevant to parenting one's own child (Van IJzendoorn, 1995). In turn, these information processing rubrics are thought to guide parenting practices and predict attachment security in the next generation (Bretherton, 1990). A parent's SOM regarding

their relationship with their child is purportedly shaped by prior experiences of protection or vulnerability with childhood caregivers (Hesse & Main, 1999). Thus, intergenerational CSA effects may be mediated by distortions in the coherence and autonomy of a parent's SOM.

A parent with a history of reasonably supportive and sensitive caregiving during their own childhood is likely to develop a coherent and autonomous SOM about their child, which promotes a parent's sense of confidence and security to maintain control and connection in the parent-child relationship, even in times of stress or conflict (Bowlby, 1980). An autonomous SOM enables the parent to maintain affective attunement and clear parent-child boundaries in the context of children's behavioral difficulties, and supports parenting behaviors that prevent the escalation of child behavior problems (Shlafer, Raby, Lawler, Hesemeyer, & Roisman, 2015). In contrast, in the context of aversive caregiving experiences, such as CSA, the parent is likely to develop an incoherent and helpless SOM that is characterized by distorted or fragmented representations of the parent-child relationship (George & Solomon, 1999). A helpless SOM regarding the parent-child relationship signals that the parent has not successfully shifted from a position of receiving care to one of providing care and protection to the next generation (George & Solomon, 2011). As a result of frightening or painful attachment-related memories from childhood, the parent with a helpless SOM may perceive the child as uncontrollable and beyond the bounds of parental influence in times of conflict or as excessively capable and not in need of parental care or protection (George & Solomon, 2011). Either manifestation of a helpless SOM can prompt the parent to abdicate authority and invert or equate the parent and child roles, particularly during times of stress and conflict. Thus, a helpless SOM may contribute to child behavior problems, particularly externalizing problems.

Despite a strong theoretical foundation for expecting a positive relation between a history of CSA and a parent's helpless SOM regarding the current parent—child relationship, no empirical study to our knowledge has specifically evaluated this relation. Further, only one study has evaluated the relation between a helpless SOM and later child adjustment, with data supporting a positive relation with child externalizing problems (Lecompte & Moss, 2014). To fill these knowledge gaps, we evaluated a theoretically specified indirect pathway between mothers' history of CSA and child behavior problems via mothers' helpless SOM.

Child Gender as a Moderator of Maternal CSA History and Helpless SOM

Despite the gendered nature of CSA, few studies have examined differential effects of mothers' CSA history on mother–son versus mother–daughter relationships. On the one hand, given that most perpetrators of CSA are male (Vogeltanz et al., 1999), survivors may experience heightened feelings of helplessness in their relationships with sons. Indeed, some evidence suggests mothers with a history of CSA engage in more permissive and peer-like interactions with sons than with daughters (Sroufe, Jacobvitz, Mangelsdorf, DeAngelo, & Ward, 1985). On the other hand, survivors may be reminded of their own victimization experiences when mothering daughters and may manage these feelings of vulnerability by expressing more hostility and less warmth toward daughters than toward sons (D. Cross et al., 2016). Given that a mother's history of maltreatment can be triggered by a variety of child factors, including gender (Lyons-Ruth, Melnick, Bronfman, Sherry, & Llanas,

2004), as well as evidence that parents generally differ in how they perceive and relate to sons versus daughters (Raley & Bianchi, 2006), we explored whether associations between mothers' history of CSA and a helpless SOM regarding the parent–child relationship varied by child gender.

Study Overview

This investigation evaluated theoretically specified relations among mothers' CSA severity, helpless SOM, and child behavior problems to test five hypotheses. First, mothers who experienced more severe CSA in terms of intensity and chronicity would be more likely to have children who evidenced escalating behavior problems from ages 4 to 8. We opted to focus on the severity of mothers' CSA experiences in light of calls for more nuanced measures of child maltreatment exposure (Bremner, Vermetten, & Mazure, 2000) and the salience of experiential intensity and chronicity for shaping attachment representations (Lyons-Ruth et al., 2004). Second, we predicted that mothers' CSA severity would be positively associated with a helpless SOM about the parent-child relationship. Third, we hypothesized that a mother's helpless SOM would predict increased child behavior problems from the preschool period (age 4) to age 8. Fourth, we predicted there would be a significant indirect path from mothers' CSA severity to child behavior problems via the mother's helpless SOM about the parent-child relationship. Fifth, we considered whether or not child gender moderated the hypothesized relation between mothers' CSA severity and mothers' helpless SOM. Finally, because both parenting beliefs and child behavior are influenced by race/ethnicity, socioeconomic status (SES), and parental symptomatology (Pinderhughes, Dodge, Bates, Pettit, & Zelli, 2000; West & Newman, 2003), we held the following covariates constant in all analyses: mothers' race/ethnicity, family SES, mothers' anxious/ depressive symptomatology, and children's prior behavior problems.

Method

Participants

Participants were drawn from a longitudinal study of child development in 250 preschooler-caregiver dyads. Dyads were excluded from these analyses if the participating caregiver was not the biological mother (n = 25, 10%), as SOM regarding one's own child may be distinct from SOM regarding a child who has recently or only temporarily been placed in one's care (e.g., foster care; Bates & Dozier, 2002). Biological mothers self-identified as Latina (56.9%), Black (17.3%), White (20%), or multiracial/other (5.8%) and reflected the Southern California community from which they were recruited (U.S. Census Bureau, 2011). Seven mothers preferred Spanish to English, and Wave 1 interviews were translated by a Spanishspeaking research assistant in these seven cases. At the time the study began, mothers' average age was 30.53 years (SD = 6.07) and the children (48.0% female) averaged 49.05 months of age (SD = 2.91). Average SES based on the Hollingshead (1975) Four-Factor Index was 32.44 (SD = 11.25), which corresponds to clerical/sales work. Most mothers were employed (68.9%), and most were married (60.9%) or in a committed relationship (20.4%). Of the 225 dyads who completed the Wave 1 assessment when the children were 4 years old, 195 (86.67%) completed a follow-up assessment at age

6 ($M_{\rm age_Wave2} = 73.33$ months, SD = 2.54), and 198 (88%) completed a third assessment at age 8 ($M_{\rm age_Wave3} = 97.51$ months, SD = 2.93). Across time, 209 dyads (92.89%) completed two or more visits. There were no significant differences between dyads who completed all assessment waves (n = 189) and dyads who did not (n = 36) on any study variables.

Procedures

Caregivers were recruited to participate in a longitudinal study of children's early learning and development via flyers placed in community-based childcare centers. Exclusionary criteria included children who were diagnosed with a developmental disability or delay, outside the range of 45–54 months, and/or unable to understand English. At each data wave, dyads completed a 3-hr laboratory assessment that included measures with the child, the caregiver, and the caregiver and child interacting. Caregivers were compensated with US\$25/hr of assessment, and children received a small gift for each visit. Informed consent and assent were obtained from the child's legal guardian and the child (beginning at age 8). All procedures were approved by the human research review board of the participating university.

Measures

Mothers' CSA severity.—At Wave 1 (age 4), mothers provided behaviorally specific information regarding their own experiences of CSA during a verbal administration of the Early Trauma Inventory (Bremner et al., 2000). In this structured interview, mothers were asked a series of increasingly specific questions regarding experiences of unwelcome sexual contact by a person 5 or more years older during childhood (i.e., prior to age 18), including ages of onset and offset, perpetrator identity, behavioral specifics of each incident, resulting injuries or interventions (e.g., legal and medical), and frequency of maltreatment. Two independent raters evaluated CSA severity across four levels, including *no abuse* (0), *mild abuse* (1), *moderate abuse* (2), and *severe abuse* (3), using the criteria set forth by McGee, Wolfe, Yuen, Wilson, and Carnochan (1995). CSA severity reflected both the intensity and frequency of abuse with mild ratings assigned to cases of low (e.g., touching over clothes) or moderate (e.g., kissing) intensity and low frequency, moderate ratings for experiences of high intensity (e.g., any kind of penetration) and low frequency or low intensity and high frequency, and severe ratings for cases when the maltreatment was both high intensity and high frequency (ICC = .948).

Mothers' helpless SOM.—At Wave 2 (age 6), mothers completed George and Solomon's (2007) Caregiving Helplessness Questionnaire (CHQ). Helpless SOM was assessed using a 6-item "Mother Helpless" subscale based on the degree to which mothers endorsed statements about the parent–child relationship (e.g., When I am with my child, I often feel out of control; α = .88) on a 5-point Likert-type scale from *not at all characteristic* (1) to *very characteristic* (5). The CHQ Helpless subscale evidences discriminant validity with measures of parental stress and coping and convergent validity with interview ratings of maternal helplessness (George & Solomon, 2011; Huth-Bocks, Guyon-Harris, Calvert, Scott, & Ahlfs-Dunn, 2016; Vulliez-Coady, Obsuth, Torreiro-Casal, Ellertsdottir, & Lyons-Ruth, 2013). The CHQ has demonstrated good reliability in prior research (Lecompte & Moss, 2014) and in the current sample (α = .77).

Children's behavior problems.—At Waves 1 (age 4) and 3 (age 8), child examiners rated children's externalizing (e.g., defiance) and internalizing (e.g., anxiety) behavior problems using the Test Observation Form (TOF; McConaughy & Achenbach, 2004). The TOF is a standardized form for rating behavior, affect, and test-taking style during assessments with children aged 2–18. Immediately after the 3-hr laboratory visit, the examiner rated the child's behavior on 125 problem items, using a 4-point scale from *no occurrence* (0) to *definite occurrence with severe intensity* (3). All but one examiner was female. There were no significant mean differences in behavior problem ratings as a function of examiner gender or examiner—child gender match. The TOF was validated in a large sample of clinically referred and nonreferred children from varied ethnic groups. Total scaled *t* scores were used here, with scores 65 connoting clinically elevated internalizing problems (30.7% and 20.4% at Waves 1 and 3, respectively) and externalizing problems (25.8% and 23.1% at Waves 1 and 3, respectively).

Mothers' symptomatology.—At Wave 2 (age 6), mothers' symptoms of anxiety and depression were collected using the Brief Symptom Inventory (BSI; Derogatis, 1993). Items assessed how much symptoms of anxiety (6 items; $\alpha = .82$) and depression (6 items; $\alpha = .70$) bothered participants in the past week on a 5-point scale from *not at all* (0) to *extremely* (4). The BSI demonstrates acceptable reliability in clinical and community populations (Boulet & Boss, 1991; Derogatis & Melisaratos, 1983) and diverse racial/ethnic groups (Hoe & Brekke, 2009). Mothers' t scores on the anxiety and depression scales were composited for use in these analyses (r = .61).

Data preparation and analysis.—Data were examined to evaluate distributional assumptions for parametric statistics (Afifi, Kotlerman, Ettner, & Cowan, 2007). Mothers' helplessness was nonnormally distributed (skew = 2.510, kurtosis = 9.650) and was log transformed (posttransformation skew = 1.375, kurtosis = 1.778) prior to regression analyses. Maximum likelihood estimation with the EM algorithm in SPSS 24.0 was used to impute missing data for mothers' history of CSA (0.4%), mothers' symptomatology (14.2%), mothers' helpless SOM (14.7%), and children's externalizing and internalizing behavior problems at Waves 1 (1.8%) and 3 (15.6%) as supported by Little's (1988) MCAR test; $\chi^2 = 167.317$, df = 186, p = .834. The EM algorithm uses multiple iterations of imputation in a single data set, rather than list-wise deletion or imputation across multiple data sets, which were the only methods available in prior versions of SPSS. All findings replicated prior to data imputation.

Following descriptive and bivariate analyses, regression analyses evaluated the effect of mothers' CSA severity on changes in child behavior problems from age 4 (Wave 1) to age 8 (Wave 3) through mothers' helpless SOM at age 6 (Wave 2) and explored the moderating influence of child gender on the predicted relation between mothers' CSA severity and a helpless SOM regarding the parent—child relationship. All analyses controlled for covariates including family SES, mothers' race/ethnicity (Latina = 1), prior child behavior problems, and mothers' symptomatology. Continuous predictors were mean centered to limit multicollinearity (Kraemer & Blasey, 2004).

We evaluated indirect, direct, and moderated effects using Hayes's (2013) PROCESS routine for moderated mediation analyses. This approach represents an advance over traditional regression techniques because it employs a bootstrapping method to yield 95% confidence intervals (CIs) for both unconditional and conditional direct and indirect effects while correcting for nonnormality across predictors. This correction is particularly important when examining moderation effects because interaction terms are known to have nontrivial skew and kurtosis (Hayes, 2013). Conditional indirect effects were evaluated by calculating the significance of the indirect effect at a given value of the moderator, accompanied by bias-corrected bootstrapped 95% CIs in lieu of normal theory tests of significance (i.e., p values). As a nonparametric technique, bootstrapping minimizes the influence of nonnormality across study variables and yields a more reliable estimation of indirect effects than Sobel's (1982) test, particularly in smaller samples (Preacher, Rucker, & Hayes, 2007). The PROCESS routine also addresses problems of heteroscedasticity by using bias-corrected standard errors in the calculation of CIs.

Results

Descriptive and Bivariate Analyses

In this high-risk community sample, 40% of mothers reported a history of CSA, with most (58.89%) endorsing moderate CSA severity (e.g., frequent experiences of fondling). An MANOVA evaluating mean differences across study variables revealed no significant differences as a function of mothers' race/ethnicity, child gender, nor their interaction. Mothers' CSA severity (Wave 1) was positively related to mothers' symptomatology and helpless SOM (Wave 2) but negatively related to child internalizing problems at age 8 (Wave 3; see Table 1). Mothers' helpless SOM was positively related to child externalizing problems at age 8 (Wave 3), and externalizing and internalizing problems were correlated within and across waves. Mothers' anxious/depressive symptomatology was negatively associated with child internalizing problems at age 8.

Bivariate relations among study variables differed by child gender. Mothers' CSA severity was positively related to a helpless SOM among mothers of daughters, but not among mothers of sons. For girls, mothers' CSA severity was negatively related to internalizing problems and positively related to externalizing problems at age 8, but these relations were not significant for boys. Regarding covariates, family SES was negatively associated with externalizing problems among girls, but not boys, at ages 4 and 8. Mothers' CSA severity was negatively related to internalizing problems among boys, but not among girls, at age 4. Externalizing problems at age 4 were positively associated with a helpless SOM among mothers of girls, but not among mothers of boys. Although externalizing problems evidenced stability among both girls and boys, internalizing problems evidenced stability among boys only. Externalizing and internalizing problems were correlated at age 4 for both boys and girls, but only for boys at age 8.

Moderated Mediation Analyses

As shown in Table 2, Hayes's (2013) PROCESS routine evaluated the conditional indirect effect of mothers' CSA severity (Wave 1) on examiners' reports of child externalizing and

internalizing behavior problems at age 8 (Wave 3) as explained by mothers' helpless SOM with regard to the parent—child relationship at age 6 (Wave 2). Analyses also examined the moderating influence of child gender on predicted relations between mothers' CSA severity and a helpless SOM regarding the parent—child relationship. All analyses controlled for family SES, mother's race/ethnicity, mothers' anxious/depressive symptomatology, and prior examiner reports of child behavior problems. Moderated mediation analyses revealed a small-to-medium indirect effect of mothers' CSA severity on increased child externalizing problems through increased maternal helplessness for girls, but not for boys. The direct effect from mothers' CSA severity to child externalizing problems at age 8 was not significant. Regression analyses revealed a significant negative direct effect of mothers' CSA severity on child internalizing problems, although the overall model was not significant.

Discussion

This prospective investigation evaluated a theoretically specified model of associations among mothers' history of CSA, a helpless SOM with regard to the mother–child relationship, and children's externalizing and internalizing problems from preschool to middle childhood. Mothers' history of CSA emerged as a prominent risk factor (40%) in this high-risk community sample. Consistent with our hypotheses, mediation analyses revealed a significant indirect pathway from mothers' CSA severity to increased externalizing, but not internalizing, problems in the next generation via mothers' helpless SOM with regard to the mother–child relationship. Moreover, this indirect path was significant for mother–daughter dyads, but not for mother–son dyads, due to differential relations between CSA severity and a helpless SOM about mother–daughter versus mother–son relationships.

This study highlights the potential influence of a helpless SOM with regard to the mother—child relationship on the association between mothers' CSA severity and child externalizing problems. The obtained findings are consistent with the tenets of attachment theory wherein experiences of childhood vulnerability and lack of protection are thought to influence later working models of the parent—child relationship (Bowlby, 1980; Bretherton, 1990; Hesse & Main, 1999). Further, this study supports the theory that mothers' experiences of CSA may contribute to distorted or fragmented mental representations regarding their child that activate feelings of caregiving helplessness (George & Solomon, 2011). Mothers who are survivors of CSA must navigate the responsibilities of providing care and protection to the next generation amid their own memories of abuse (Wright et al., 2012). Children's natural expressions of sexuality and intimate aspects of parenting, including caring for the child's body, may be triggering for CSA survivors and heighten their vulnerability to a helpless SOM about the parent—child relationship (Courtois, 2010).

Interestingly, CSA severity was associated with a helpless SOM among mothers of daughters, but not among mothers of sons. Although some research has found that mothers with a history of CSA express more hostility and less warmth toward daughters than sons (D. Cross et al., 2016; Sroufe et al., 1985), to our knowledge, the current investigation was the first to evaluate the moderating role of child gender on mothers' feelings of helplessness in the parent—child relationship. Although this gender pattern warrants replication, it may be that the vulnerability of the same-sex offspring is especially triggering for mothers

with a history of CSA, leading to a heightened sense of helplessness and lack of control when parenting daughters versus sons. Alternatively, the trauma of CSA may lead a mother to abdicate parental control and authority in an effort to deny the vulnerability of her young daughter because acknowledging her daughter's vulnerability would mean facing her own. These findings are consistent with prior evidence that the intergenerational effects of CSA vary by child gender (Sroufe et al., 1985) and highlight the need for more nuanced investigations of intergenerational maltreatment effects generally. Moreover, given that parenting beliefs and practices are influenced by contextual factors within and beyond the parent–child relationship (Kotchick & Forehand, 2002), future studies should examine the interaction of race/ethnicity and child gender on parents' SOM and adjustment among the children of CSA survivors.

Mothers' helpless SOM was associated with increases in children's externalizing, but not internalizing, problems. This is to be expected given that a helpless SOM is thought to prompt a parent to withdraw control and support for the child, particularly in times of conflict (George & Solomon, 2011). Moreover, attachment theory posits that parental withdrawal and distancing behaviors will activate children's proximity seeking in pursuit of parental engagement (Bowlby, 1980). In turn, a child's approach behaviors may trigger the mother's own history of threat and vulnerability, prompting further withdrawal. Over time, this transactional process could yield an escalating cycle of parental withdrawal and child activation that may lead to externalizing behavior problems.

This investigation highlights the need for ongoing research to identify mechanisms by which a parent's helpless SOM may influence children's adaptation. Attachment researchers suggest that a parent's unresolved trauma and segregated attachment memories can engender a helpless SOM that contributes to frightened and frightening caregiving behaviors, such as the aforementioned case of parental withdrawal, as well as contradictory communication patterns and intrusive parenting practices (Hesse & Main, 1999). In support of these assertions, Lyons-Ruth, Yellin, Melnick, and Atwood (2003) have shown that the severity of a mother's sexual and physical abuse during childhood is strongly related to a hostile-helpless SOM with regard to past attachment relationships as measured by the Adult Attachment Interview. Moreover, a hostile-helpless SOM with regard to one's own experience of care receipt is associated with problematic caregiving of the next generation (Lyons-Ruth & Block, 1996).

Although parenting processes are a central mechanism by which a helpless SOM about the current parent—child relationship is thought to influence child adaptation, additional mechanisms may be operative, such as the mother's partner selection (e.g., a mother who feels helpless may select a dominant partner who acts out in aggressive ways toward the mother and/or child), and/or her inability to protect the child from abuse (Rijlaarsdam et al., 2014). Moreover, bidirectional processes wherein a child's behavior may feed back to influence the parent's SOM regarding the parent—child relationship are likely to be operative and warrant consideration in future studies. Although child behavior is not considered an originating condition for parents' mental representations of attachment relationships (van IJzendoorn, 1995), documenting parent—child bidirectional effects would illustrate the modifiability of a parent's SOM and highlight potential avenues for therapeutic intervention.

Importantly, despite the significant indirect pathway from mothers' CSA to children's externalizing behavior problems through a helpless SOM, the absence of a positive direct effect in this study suggests that a history of maternal CSA is not unilaterally associated with child externalizing problems. Likewise, despite a significant negative effect of mothers' CSA severity on children's internalizing behavior problems, the magnitude of this effect did not account for significant variance in the full model. These findings speak to the ongoing need to elucidate specific vulnerability and protective factors that may influence intergenerational CSA effects (e.g., nonoffending caregivers' responses at the time of abuse disclosure, participation in therapeutic services, and the quality of romantic and peer relationships).

Strengths and Limitations

The obtained findings suggest that a history of CSA renders mothers prone to adopting a helpless SOM when parenting their own children, particularly their daughters. Moreover, this helpless SOM eventuates in heightened risk for externalizing, but not internalizing, problems in the next generation. Regression analyses controlled for important covariates thought to be correlated with study variables, including family SES, mothers' symptomatology, mothers' race/ethnicity, and children's prior behavior problems to show that mothers' history of CSA predicted externalizing problems in daughters through a helpless SOM above and beyond daughters' prior externalizing problems. Although this study drew on a large and diverse community sample with longitudinal data across multiple measures and informants, the interpretations and implications of these findings are qualified by several limitations.

First, retrospective self-reports of CSA severity are problematic in the absence of more objective measures of maltreatment history (Williams, 1994). Retrospective reporting may be affected by false reporting (Fergusson, Horwood, & Woodward, 2000), errors in recollection (DiLillo et al., 2006), and inconsistency in and/or inability to access traumatic memories (Widom & Morris, 1997). Although we may have obtained some false positive accounts of CSA, evidence suggests these are far less common than false negative accounts wherein participants fail to report abuse that actually occurred (Hardt & Rutter, 2004). Moreover, empirical studies support the convergent validity of retrospective self-reports of maltreatment with child welfare records using both administrative data and prospective indices of adjustment (Dube, Williamson, Thompson, Felitti, & Anda, 2004; Shaffer, Huston, & Egeland, 2008). Although retrospective reports capture the totality of participant's lived experiences, rather than just those associated with reported and reportable events (Hardt & Rutter, 2004; Shaffer et al., 2008), the current findings would have been bolstered by concurrent administrative data reports. Given our interest in CSA perpetrated by caregiving figures, we focused on forced or unwanted sexual contact by a person 5 or more years older than the victim and occurring prior to age 18. However, peer-perpetrated sexual abuse and assaults occurring during adulthood may evidence intergenerational effects as well.

Second, the current measure of a helpless SOM was limited in two ways. First, the CHQ relies on the mother's endorsement of conscious beliefs and perceptions. A narrative assessment of the mother's SOM regarding her relationship with her own child may have

captured both conscious and unconscious elements of representation more fully than the CHQ (Aber, Slade, Berger, Bresgi, & Kaplan, 1985). Second, the CHQ has not been well validated in diverse racial—ethnic groups. To begin to address this concern, we conducted a post hoc analysis to show that we obtained strong reliability in subsamples of Latina and non-Latina mothers. However, there is a need for more extensive efforts to evaluate the psychometric properties of the CHQ in diverse populations.

Third, we did not obtain data from fathers. Thus, it is unknown if these findings generalize to father-child dyads. Moreover, although child gender moderated the association between mothers' CSA history and helpless SOM, it is unclear whether this reflected aspects of the mother-daughter versus mother-son relationship or within-versus cross-gender dyadic processes more generally. Future research should examine the intergenerational effects and potential mediators of fathers' CSA.

Finally, as noted above, future investigations will benefit from more comprehensive research designs that can better support causal inferences, test additional mediating mechanisms, and evaluate bidirectional parent—child transactions. Relatedly, the absence of a strong direct association between CSA and child behavior problems indicates that CSA can instantiate multiple developmental pathways. Future studies should explore additional factors such as age of onset, ethnic identity, and the presence of vulnerability and protective factors that may shape the intergenerational effects of CSA.

Implications for Policy and Practice

The current findings support calls to consider parents' SOM as an important port of therapeutic entry and change (Lyons-Ruth et al., 2004; Sameroff, 2004; Sher-Censor & Yates, 2014). Parents' mental representations of the parent—child relationship may underlie parenting practices that can result in the escalation or mitigation of child behavior problems. As such, a parent's SOM represents a meaningful area for parenting research and intervention.

Although a parent's SOM is likely to remain stable over time (Bretherton, 1990), mental representations are flexible and may be modified through intervention (van IJzendoorn, 1995). Clinical interventions that focus on (a) increasing parents' insight into the connections between their past and present relationships and (b) enhancing parents' understanding of children's needs and feelings may help parents address feelings of helplessness and move toward more positive working models of the parent-child relationship (Erickson, Korfmacher, & Egeland, 1992). Trauma-informed psychotherapy models that specifically address a parent's SOM, such as narrative and attachment-based therapies, may support parents to understand the origins of their helpless SOM, localize SOM processes in the self rather than in the child, and reframe past experiences of abuse and trauma (Erickson et al., 1992; Marvin, Cooper, Hoffman, & Powell, 2002). Existing evidence-based and trauma-informed interventions, such as Trauma-Focused Cognitive Behavioral Therapy (Cohen, Mannarino, & Deblinger, 2016), Child-Parent Psychotherapy (Lieberman, 1992), and Parent-Child Interaction Therapy (Eyberg & Boggs, 1998), may benefit from the addition of components that focus specifically on parents' feelings of helplessness and lack of control in past and present relationships. For example, interventions

could incorporate parent-focused sessions to explore parents' mental representations of prior and current attachment relationships and enhance parental confidence, as well as parent—child joint sessions to enhance parent—child communication, safety, affect regulation, and appropriate parent—child roles. Efforts to assist parents to address and alleviate a helpless SOM regarding the parent—child relationship could mitigate the intergenerational transmission of child maltreatment and insecure attachment.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by the National Institute of Health Grant 1R03HD065036-01A and the National Science Foundation Grant 0951775 awarded to Tuppett M. Yates.

References

- Aber JL, Slade A, Berger B, Bresgi I, & Kaplan M (1985). The parent development interview. Unpublished manuscript.
- Afifi AA, Kotlerman JB, Ettner SL, & Cowan M (2007). Methods for improving regression analysis for skewed continuous or counted responses. Annual. Review of Public Health, 28, 95–111.
- Alexander PC, Teti L, & Anderson CL (2000). Childhood sexual abuse history and role reversal in parenting. Child Abuse & Neglect, 24, 829–838. [PubMed: 10888021]
- Bailey HN, DeOliveira CA, Wolfe VV, Evans EM, & Hartwick C (2012). The impact of childhood maltreatment history on parenting: A comparison of maltreatment types and assessment methods. Child Abuse & Neglect, 36, 236–246. [PubMed: 22444714]
- Banyard VL (1997). The impact of childhood sexual abuse and family functioning on four dimensions of women's later parenting. Child Abuse & Neglect, 21, 1095–1107. [PubMed: 9422829]
- Barth J, Bermetz L, Heim E, Trelle S, & Tonia T (2013). The current prevalence of child sexual abuse worldwide: A systematic review and meta-analysis. International Journal of Public Health, 58, 469–483. [PubMed: 23178922]
- Bates BC, & Dozier M (2002). The importance of maternal state of mind regarding attachment and infant age at placement to foster mothers' representations of their foster infants. Infant Mental Health Journal, 23, 417–431.
- Berzenski SR, Yates TM, & Egeland B (2014). A multidimensional view of continuity in intergenerational transmission of child maltreatment. In Korbin JE & Krugman RD (Eds.), Handbook of child maltreatment (pp. 115–129). Berlin, Germany: Springer.
- Boulet J, & Boss MW (1991). Reliability and validity of the brief symptom inventory. Psychological Assessment: A Journal of Consulting and Clinical Psychology, 3, 433.
- Bowlby J (1980). Attachment and loss: Loss, sadness and depression (Vol. 3). New York, NY: Basic Books
- Bremner JD, Vermetten E, & Mazure CM (2000). Development and preliminary psychometric properties of an instrument for the measurement of childhood trauma: The early trauma inventory. Depression and Anxiety, 12, 1–12. [PubMed: 10999240]
- Bretherton I. (1990). Communication patterns, internal working models, and the intergenerational transmission of attachment relationships. Infant Mental Health Journal, 11, 237–252.
- Cohen LR, Hien DA, & Batchelder S (2008). The impact of cumulative maternal trauma and diagnosis on parenting behavior. Child Maltreatment, 13, 27–38. [PubMed: 18174346]
- Cohen JA, Mannarino AP, & Deblinger E (2016). Treating trauma and traumatic grief in children and adolescents. New York, NY: Guilford.
- Collin-Vezina D, Cyr M, Pauze R, & McDuff P (2005). The role of depression and dissociation in the link between childhood sexual abuse and later parental practices. Journal of Trauma & Dissociation, 6, 71–97. doi:10.1300/J229v06n01_05 [PubMed: 16150686]
- Courtois CA (2010). Healing the incest wound: Adult survivors in therapy. New York, NY: W. W. Norton.

Cross D, Kim YJ, Vance LA, Robinson G, Jovanovic T, & Bradley B (2016). Maternal child sexual abuse is associated with lower maternal warmth toward daughters but not sons. Journal of Child Sexual Abuse, 25, 813–826. doi:10.1080/10538712.2016.1234532 [PubMed: 27874726]

- Cross W. (2001). A personal history of childhood sexual abuse: Parenting patterns and problems. Clinical Child Psychology and Psychiatry, 6, 563–574.
- Derogatis LR (1993). Brief symptom inventory: BSI; Administration, scoring, and procedures manual. London, England: Pearson.
- Derogatis LR, & Melisaratos N (1983). The brief symptom inventory: An introductory report. Psychological Medicine, 13, 595–605. [PubMed: 6622612]
- DiLillo D, & Damashek A (2003). Parenting characteristics of women reporting a history of childhood sexual abuse. Child Maltreatment, 8, 319–333. [PubMed: 14604178]
- DiLillo D, Foriter MA, Hayes SA, Trask E, Perry AR, Messman-Moore T, ... Nash C (2006). Retrospective assessment of childhood sexual and physical abuse. Assessment, 13, 297–312. [PubMed: 16880281]
- DiLillo D, Tremblay GC, & Peterson L (2000). Linking childhood sexual abuse and abusive parenting: The mediating role of maternal anger. Child Abuse & Neglect, 24, 767–779. [PubMed: 10888017]
- Dube SR, Williamson DF, Thompson T, Felitti VJ, & Anda RF (2004). Assessing the reliability of retrospective reports of adverse childhood experiences among adult HMO members attending a primary care clinic. Child Abuse & Neglect, 28, 729–737. [PubMed: 15261468]
- Erickson MF, Korfmacher J, & Egeland BR (1992). Attachments past and present: Implications for therapeutic intervention with mother-infant dyads. Development and Psychopathology, 4, 495–507.
- Eyberg SM, & Boggs SR (1998). Parent-child interaction therapy: A psychosocial intervention for the treatment of young conduct-disordered children. In Briesmeister JM & Schaefer CE (Eds.), Handbook of parent training: Parents as co-therapists for children's behavior problems (pp. 61–97). Hoboken. NJ: Wiley.
- Fergusson DM, Horwood LJ, & Woodward LJ (2000). The stability of child abuse reports: A longitudinal study of the reporting behavior of young adults. Psychological Medicine, 30, 529–544. [PubMed: 10883709]
- Finkelhor D, Shattuck A, Turner HA, & Hamby SL (2014). The lifetime prevalence of child sexual abuse and sexual assessed in late adolescence. Journal of Adolescent Health, 55, 329–333. doi:10.1016/j.jadohealth.2013.12.026
- Fitzgerald MM, Shipman KL, Jackson JL, McMahon RJ, & Hanley HM (2005). Perceptions of parenting versus parent-child interactions among incest survivors. Child Abuse Neglect, 29, 661–681. doi:10.1016/j.chiabu.2004.10.012 [PubMed: 15979708]
- George C, & Solomon J (1999). Attachment and caregiving: The caregiving behavioral system. In Cassidy J & Shaver P (Eds.), Handbook of attachment: Theory, research, and clinical applications (pp. 649–670). New York, NY: Guilford Press.
- George C, & Solomon J (2007). Caregiving helplessness questionnaire. Unpublished manuscript, Mills College, Oakland, CA.
- George C, & Solomon J (2011). Caregiving helplessness: The development of a screening measure for disorganized caregiving. In Solomon J & George C (Eds.), Disorganized Attachment and Caregiving (pp. 133–166). New York, NY: Guilford Press.
- Hardt J, & Rutter M (2004). Validity of adult retrospective reports of adverse childhood experiences: Review of the evidence. Journal of Child Psychology and Psychiatry, 45, 260–273. [PubMed: 14982240]
- Hayes AF (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York, NY: Guilford Press.
- Herman J. (1981). Father-daughter incest. Professional Psychology, 12, 76.
- Hesse E, & Main M (1999). Second-generation effects of unresolved trauma in nonmaltreating parents: Dissociated, frightened, and threatening parental behavior. Psychoanalytic Inquiry, 19, 481–540.
- Hillberg T, Hamilton-Giachritsis C, & Dixon L (2011). Review of meta-analyses on the association between child sexual abuse and adult mental health difficulties: A systematic approach. Trauma Violence Abuse, 12, 38–49. doi:10.1177/1524838010386812 [PubMed: 21288934]

Hollingshead AB (1975). Four-factor index of social status. New Haven, CT: Yale University.

- Hoe M, & Brekke J (2009). Testing the cross-ethnic construct validity of the brief symptom inventory. Research on Social Work Practice, 19, 93–103.
- Huth-Bocks AC, Guyon-Harris K, Calvert M, Scott S, & Ahlfs-Dunn S (2016). The caregiving helplessness questionnaire: Evidence for validity and utility with mothers of infants. Infant Mental Health Journal, 37, 208–221. [PubMed: 27079544]
- Kotchick BA, & Forehand R (2002). Putting parenting in perspective: A discussion of the contextual factors that shape parenting practices. Journal of Child and Family Studies, 11, 255–269.
- Kraemer HC, & Blasey CM (2004). Centring in regression analyses: A strategy to prevent errors in statistical inference. International Journal of Methods in Psychiatric Research, 13, 141–151. [PubMed: 15297898]
- Lecompte V, & Moss E (2014). Disorganized and controlling patterns of attachment, role reversal, and caregiving helplessness: Links to adolescents' externalizing problems. American Journal of Orthopsychiatry, 84, 581–589. doi:10.1037/ort0000017 [PubMed: 25265220]
- Lewis T, McElroy E, Harlaar N, & Runyan D (2016). Does the impact of child sexual abuse differ from maltreated but non-sexually abused children? A prospective examination of the impact of child sexual abuse on internalizing and externalizing behavior problems. Child Abuse & Neglect, 51, 31–40. doi:10.1016/j.chiabu.2015.11.016 [PubMed: 26712421]
- Liang B, Williams LM, & Siegel JA (2006). Relational outcomes of childhood sexual trauma in female survivors a longitudinal study. Journal of Interpersonal Violence, 21, 42–57. [PubMed: 16399923]
- Lieberman AF (1992). Infant-parent psychotherapy with toddlers. Development and Psychopathology, 4, 559–574.
- Little RJ (1988). A test of missing completely at random for multivariate data with missing values. Journal of the American Statistical Association, 83, 1198–1202.
- Lyons-Ruth K, & Block D (1996). The disturbed caregiving system: Relations among childhood trauma, maternal caregiving, and infant affect and attachment. Infant Mental Health Journal, 17, 257–275.
- Lyons-Ruth K, Melnick S, Bronfman E, Sherry S, & Llanas L (2004). Hostile-helpless relational models and disorganized attachment patterns between parents and their young children: Review of research and implications for clinical work. In Atkinson L & Goldberg S (Eds.), Attachment issues in psychopathology and intervention (pp. 65–94). Mahwah, NJ; Lawrence Erlbaum Associates.
- Lyons-Ruth K, Yellin C, Melnick S, & Atwood G (2003). Childhood experiences of trauma and loss have different relations to maternal unresolved and hostile-helpless states of mind on the AAI. Attachment & Human Development, 5, 330–352 [PubMed: 15061308]
- Marvin R, Cooper G, Hoffman K, & Powell B (2002). The circle of security project: Attachment-based intervention with caregiver-pre-school child dyads. Attachment & Human Development, 4, 107–124. [PubMed: 12065033]
- McConaughy SH, & Achenbach TM (2004). Manual for the test observation form for ages 2-18. Burlington: University of Vermont, Center for Children, Youth, & Families.
- McGee RA, Wolfe DA, Yuen SA, Wilson SK, & Carnochan J (1995). The measurement of maltreatment: A comparison of approaches. Child Abuse & Neglect, 19, 233–249 [PubMed: 7780784]
- Neppl TK, Conger RD, Scaramella LV, & Ontai LL (2009). Intergenerational continuity in parenting behavior: Mediating pathways and child effects. Developmental Psychology, 45, 1241. [PubMed: 19702389]
- Noll JG, Trickett PK, Long JD, Negriff S, Susman EJ, Shalev I, ... Putnam FW (2017). Childhood Sexual Abuse and Early Timing of Puberty. Journal of Adolescent Health, 60, 65–71. doi:10.1016/j.jadohealth.2016.09.008
- Oates RK, Tebbutt J, Swanston H, Lynch DL, & O'Toole BI (1998). Prior childhood sexual abuse in mothers of sexually abused children. Child Abuse & Neglect, 22, 1113–1118. [PubMed: 9827316]
- Pasalich DS, Cyr M, Zheng Y, McMahon RJ, & Spieker SJ (2016). Child abuse history in teen mothers and parent-child risk processes for offspring externalizing problems. Child Abuse & Neglect, 56, 89–98. doi:10.1016/j.chiabu.2016.04.011 [PubMed: 27174770]

Pinderhughes EE, Dodge KA, Bates JE, Pettit GS, & Zelli A (2000). Discipline responses: Influences of parents' socioeconomic status, ethnicity, beliefs about parenting, stress, and cognitive-emotional processes. Journal of Family Psychology, 14, 380–400. [PubMed: 11025931]

- Preacher KJ, Rucker DD, & Hayes AF (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. Multivariate Behavioral Research, 42, 185–227. [PubMed: 26821081]
- Raley S, & Bianchi S (2006). Sons, daughters, and family processes: Does gender of children matter? Annual Review of Social Health, 32, 401–421.
- Renner LM, Whitney SD, & Easton SD (2015). Profiles of self-reported parenting competence and stress among women with/without histories of childhood sexual abuse. Journal of Child and Family Studies, 24, 749–761.
- Rijlaarsdam J, Stevens GW, Jansen PW, Ringoot AP, Jaddoe VW, Hofman A, ... Tiemeier H (2014). Maternal childhood maltreatment and offspring emotional and behavioral problems: Maternal and paternal mechanisms of risk transmission. Child Maltreat, 19, 67–78. doi:10.1177/1077559514527639 [PubMed: 24642695]
- Roberts R, O'Connor T, Dunn J, Golding J, & Team AS (2004). The effects of child sexual abuse in later family life; mental health, parenting and adjustment of offspring. Child Abuse & Neglect, 28, 525–545. doi:10.1016/j.chiabu.2003.07.006 [PubMed: 15159068]
- Sameroff AJ (2004). Ports of entry and the dynamics of mother-infant interventions. Treating Parent-Infant Relationship Problems: Strategies For Intervention, 3–28.
- Schuetze P, & Eiden RD (2005). The relationship between sexual abuse during childhood and parenting outcomes: Modeling direct and indirect pathways. Child Abuse & Neglect, 29, 645–659. doi:10.1016/j.chiabu.2004.11.004 [PubMed: 15979707]
- Shaffer A, Huston L, & Egeland B (2008). Identification of child maltreatment using prospective and self-report methodologies: A comparison of maltreatment incidence and relation to later psychopathology. Child Abuse & Neglect, 32, 682–692. [PubMed: 18638626]
- Sher-Censor E, & Yates TM (2014). Mothers' expressed emotion and narrative coherence: Associations with preschoolers' behavior problems in a multiethnic sample. Journal of Child and Family Studies, 24, 1392–1405. doi:10.1007/s10826-014-9946-z
- Shlafer RJ, Raby KL, Lawler JM, Hesemeyer PS, & Roisman GI (2015). Longitudinal associations between adult attachment states of mind and parenting quality. Attachment & Human Development, 17, 83–95. [PubMed: 25316283]
- Sobel ME (1982). Asymptotic confidence intervals for indirect effects in structural equation models. Sociological Methodology, 13, 290–312.
- Sperry DM, & Widom CS (2013). Child abuse and neglect, social support, and psychopathology in adulthood: A prospective investigation. Child Abuse & Neglect, 37, 415–425. [PubMed: 23562083]
- Sroufe LA, Jacobvitz D, Mangelsdorf S, DeAngelo E, & Ward MJ (1985). Generational boundary dissolution between mothers and their preschool children: A relationship systems approach. Child Development, 56, 317–325. [PubMed: 3987410]
- Timmons-Mitchell J, Chandler-Holtz D, & Semple WE (1998). Post-traumatic stress disorder symptoms in child sexual abuse victims and their mothers. Journal of Child Sexual Abuse, 6, 1–14.
- U.S. Census Bureau. (2011). State and county quick facts. Retrieved from: http://quickfacts.census.gov/qfd/states/06/06065.html
- Van IJzendoorn MH (1995). Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the Adult Attachment Interview. Psychological Bulletin, 117, 387. [PubMed: 7777645]
- Vogeltanz ND, Wilsnack SC, Harris TR, Wilsnack RW, Wonderlich SA, & Kristjanson AF (1999).

 Prevalence and risk factors for childhood sexual abuse in women: National survey findings. Child Abuse & Neglect, 23, 579–592. [PubMed: 10391515]
- Vulliez-Coady L, Obsuth I, Torreiro-Casal M, Ellertsdottir L, & Lyons-Ruth K (2013). Maternal role confusion: Relations to maternal attachment and mother-child interaction from infancy to adolescence. Infant Mental Health Journal, 34, 117–131. [PubMed: 25544789]

West AE, & Newman DL (2003). Worried and blue: Mild parental anxiety and depression in relation to the development of young children's temperament and behavior problems. Parenting: Science and Practice, 3, 133–154.

- Whittier N. (2016). Where are the children? Theorizing the missing piece in gendered sexual violence. Gender & Society, 30, 95–108.
- Widom CS, & Morris S (1997). Accuracy of adult recollection of childhood victimization: Part 2 childhood sexual abuse. Psychological Assessment, 9, 34–46.
- Williams LM (1994). Recall of childhood trauma: A prospective study of women's child sexual abuse. Journal of Consulting and Clinical Psychology, 62, 1167–1176. [PubMed: 7860814]
- Wright MOD, Fopma-Loy J, & Oberle K (2012). In their own words: The experience of mothering as a survivor of childhood sexual abuse. Development and Psychopathology, 24, 537–552. [PubMed: 22559129]
- Zuravin SJ, & Fontanella C (1999). Parenting behaviors and perceived parenting competence of child sexual abuse survivors. Child Abuse & Neglect, 23, 623–632. [PubMed: 10442828]

Linde-Krieger and Yates Page 18

Table 1.

Descriptive Statistics and Bivariate Correlations Among Study Variables.

Variable	M (SD)	-	2	3	4	w	9	7
1. Family SES (age 4)	31.950 (12.271)		1		1	1	1	1
2. Externalizing behavior (age 4)	61.137 (8.015)	120			I	I	1	1
		030						
		212*						
3. Internalizing behavior (age 4)	62.616 (7.593)	113	.343 **		I	I	I	I
		139	.425**					
		094	.256**					
4. Mothers' CSA severity (age 4)	0.773 (1.025)	018	046	117		I	I	I
		.035	131	195*				
		077	.050	029				
5. Mothers' symptomatology (age 6)	47.320 (7.326)	.00	.016	013	.189	I	1	I
		.036	008	026	.206*			
		045	.047	004	.168			
6. Mothers' helplessness (age 6)	7.933 (2.699)	067	.165*	.072	.220	.554	I	I
		.033	.038	.095	060.	.540**		
		168	.296**	.049	.359**	.575		
7. Externalizing behavior (age 8)	61.230 (6.360)	120	.340 **	.028	900-	.015	.197	
		058	.276**	.056	.048	030	.073	
		191*	.433 **	001	.055	.101	.369**	
8. Internalizing behavior (age 8)	60.720 (5.710)	073	.015	.161	160^{*}	135*	.007	.225**
		095	.044	.217*	131	105	.125	.353**
		090	013	.094	194*	182	118	.065

Note. Top row = total sample; second row = males; third row = females; SES = socioeconomic status; CSA = child sexual abuse.

^{*} *p* < .05.

p < .01.

Author Manuscript

Table 2.

Conditional Indirect Effect of Mothers' CSA Severity on Child Behavior Problems Through Mothers' Helpless State of Mind as Moderated by Child Gender.

			Externalizing Problems	roblems				Internalizing Problems	roblems	
		Bootstrapped	pbdd	95% CI Bia	95% CI Bias Corrected		Bootstrapped	apped	95% CI Biz	95% CI Bias Corrected
Effect	б	SE	ţ	LLCI	ULCI	Ф	SE	t	LLCI	ULCI
Covariates										
SES	075	.064	-1.186	201	.050	013	990.	-0.524	165	960.
Mother's race/ethnicity (Latina = 1)	050	.127	-0.392	300	.201	.271	.133	2.045	.010	.533
Mother's symptomatology	095	920.	-1.254	245	.055	201	620.	-2.544	356	.045
Externalizing behavior problems	.316	.064	4.958	.190	.442		I	I	I	I
Internalizing behavior problems	1	I	I	I		880.	990.	1.341	042	.218
CSA severity \rightarrow helpless SOM	004	.100	0.041	193	.201	023	920.	-0.296	173	.127
Gender (female = 1) \rightarrow helpless SOM	016	.110	-0.145	233	.201	054	.110	-0.494	271	.162
CSA severity * gender \rightarrow helpless SOM	.246	.109	2.247	.030	.461	.258	.110	2.335	.040	.476
Helpless SOM \rightarrow behavior problems	.199	.077	2.578	.047	.351	.164	620.	2.065	.007	.320
Direct effect										
CSA severity \rightarrow behavior problems	013	.064	-0.204	139	.113	146	.067	-2.195	277	015
Conditional indirect effects										
Males	003	.016	I	034	.032	004	.014	1	032	.027
Females	.046	.026	I	.004	.105	.039	.024	I	002	.093
Total R ²			.158**					060.		
<i>R</i> (6, 218)			6.837					3.600		
Cohen's &		•	.188 [.079, .321]					.099 [.021, .189]		

Note. All results are standardized. SE and confidence intervals are bias-corrected based on 10,000 samples. SE = standard error; LLCI = lower limit confidence interval; ULCI = upper limit confidence interval; SES = socioeconomic status; CSA = child sexual abuse; SOM = state of mind.

p < .05.

p < .01.