

A structural equation model of the etiology and developmental consequences of parent-child role confusion

Linnea B. Linde-Krieger^{*}, Tuppet M. Yates

Department of Psychology University of California, Riverside 900 University Avenue, Riverside, CA 92521., United States of America

ARTICLE INFO

Keywords:

Child maltreatment
Parent-child role confusion
Psychopathology
Representation
Structural equation modeling

ABSTRACT

This longitudinal investigation tested a theoretically-specified model of the etiology and developmental consequences of parent-child role confusion, wherein there is a deterioration of generational boundaries such that the parent looks to their child to meet the parent's own needs for comfort or support. Employing a diverse sample of 250 female caregiver-child dyads (50% female and 46% Latinx children), this study tested a fully-latent structural equation model to evaluate serial mediation from parents' reported history of their own maltreatment to children's psychopathology in late childhood via role confusion during the preschool years and children's negative representations of the parent in middle childhood. As hypothesized, the severity of parents' own history of child maltreatment was associated with higher role confusion in their relationship with their preschooler, and this role confusion contributed to children's negative representations of the parent during middle childhood, which, in turn, were associated with higher levels of child psychopathology. This study informs developmental science and clinical practice by elucidating modifiable mechanisms by which a parent's prior experience of child maltreatment may impact their child's adaptation in the next generation. Interventions that support the stability of vertical parent-child boundaries may buffer children from negative intergenerational child maltreatment effects.

Introduction

The maintenance of vertical hierarchies and clear boundaries in parent-child relationships is essential for adaptive family functioning and positive child development (e.g., Bowlby, 1973; Minuchin, 1974). Psychological boundaries between family members are important for defining age-appropriate roles (e.g., parents as caretakers for young children and young children as recipients of parental care) and for ensuring that family members' emotional needs are met within appropriate subsystems (e.g., parents' emotional needs should be met within spousal or adult subsystems, rather than the parent-child subsystem). In a balanced family system, parents are tasked with providing care and nurturance for children rather than relying on children for emotional and instrumental support.

When a parent expects and receives comfort or support from a child, particularly a young child, generational boundaries may become blurred or distorted through a process known as parent-child role confusion (Macfie, Brumariu, & Lyons-Ruth, 2015). Theoretical and empirical works suggest that parent-child role confusion puts children at risk for a

range of negative developmental outcomes, including internalizing and externalizing symptomatology (Hetherington, 1999; Macfie, Houts, McElwain, & Cox, 2005). However, the origins of parent-child role confusion and specific pathways by which it may undermine child adjustment remain unclear and untested. Therefore, the current investigation evaluated a theoretically-specified serial mediation model of the etiology and developmental consequences of parent-child role confusion. Specifically, this study examined transgenerational effects of parent's own history of maltreatment on parent-child boundaries, and evaluated a pathway from parent-child role confusion during the preschool years to psychopathology in later childhood through children's negative representations of the parent during middle childhood. By elucidating modifiable mechanisms undergirding negative intergenerational maltreatment effects, this investigation sought to inform family-based prevention and intervention efforts.

Role confusion in the parent-child relationship

Researchers and clinicians have long identified a problematic pattern

^{*} Corresponding author.

E-mail addresses: linnea.linde@email.ucr.edu (L.B. Linde-Krieger), tuppet.yates@ucr.edu (T.M. Yates).

of parent-child interaction characterized by the deterioration of hierarchical parent-child boundaries (see Kerig, 2005, for review). Clinical, developmental, and family systems theorists describe distorted parent-child boundaries using a variety of terms, including parent-child role reversal, parentification, adultification, spousification, boundary dissolution, enmeshment, and role equalization (Kerig, 2005). Although these terms are not entirely interchangeable (e.g., spousification connotes a specific form of role confusion wherein the parent elevates the child to the status of an adult romantic partner), each term captures a shift in parent and child roles wherein the parent looks to the child to meet the parent's own emotional needs, and the child becomes an equal or authority figure in relation to the parent.

Parent-child role confusion is an umbrella term that integrates these varied literatures and captures the deterioration of generational boundaries between parents and children in both role-reversed and role-equating forms (Macfie, Brumariu, & Lyons-Ruth, 2015). For example, in role-reversed relationships, children may adopt a controlling-caregiving stance (i.e., helpful and nurturing) or a controlling-punitive stance (i.e., domineering and critical) in relation to the parent (George & Solomon, 2011). In a role-equated relationship, a parent may elevate the child to the role of adult partner or spouse to fulfill the parent's own needs for comfort and companionship, often at the expense of tending to the child's needs. Alternately, a parent may assume a peer-like stance in relation to the child (i.e., parent acting as a "friend" rather than an authority figure). An overriding theme across these diverse expressions of parent-child role confusion is the parent's denial of the psychological distinctiveness of the child and the consequent blurring of generational boundaries such that neither parent nor child adheres to culturally- and developmentally-appropriate family roles (Vulliez-Coady, Obsuth, Torreiro-Casal, Ellertsdottir, & Lyons-Ruth, 2013).

Etiology of Parent-Child Role Confusion: Parents' Experiences of Child Maltreatment

Although few studies have examined the etiology of parent-child role confusion, theory and research suggest that childhood experiences of protection and vulnerability within caregiving relationships shape later parenting beliefs and behaviors. According to attachment theory (Bowlby, 1969/1980), the quality of relational exchanges in the early caregiving milieu informs children's emergent mental representations of relationships (i.e., internal working models; Bretherton & Munholland, 2008), which embody their beliefs and expectations about their caregivers, themselves, and relationships with others. Thus, early parent-child relationships act as prototypes for future relationships, including with one's own children (Bretherton & Munholland, 2008). In this view, a parent who experienced adequately sensitive and responsive caregiving during childhood is likely to develop positive, autonomous representations of self and others, which support feelings of confidence and appropriate expressions of authority when parenting the next generation (Bowlby, 1980). In contrast, a parent who experienced aversive or abusive caregiving during childhood may develop distorted or fragmented representations of self and others (see Hesse & Main, 1999 for discussion), which undermine the parent's ability to successfully shift from a position of receiving care to one of providing care and protection for one's own children (George & Solomon, 2011).

In line with these assertions, data support direct intergenerational transmission of parent-child boundary disturbances (Macfie, McElwain, Houts, & Cox, 2005), as well as associations between a parent's own experiences of maltreatment during childhood and role confusion when parenting their own child (Alexander, Teti, & Anderson, 2000). This latter finding is consistent with early conceptualizations of parent-child role reversal, which held that a parent who was maltreated during childhood may rely on their own child to fulfill the parent's unmet dependency needs (Melnick & Hurley, 1969; Morris & Gould, 1963). Indeed, a history of maltreatment may instantiate a process wherein a child's expression of need triggers a parent's own frightening or painful

attachment-related memories from childhood, and increases their need for care and reassurance from the child (Hesse & Main, 1999).

Faced with traumatic reminders of their own history of vulnerability, parents with a history of child maltreatment may feel helpless to provide for their child's needs, prompting the parent to abdicate authority and invert or equate the parent and child roles (George & Solomon, 2011). This dynamic was evident in a study of second-generation Holocaust survivors and their children, wherein Scharf and Maysseless (2011) theorized that children of trauma survivors may feel coerced into caregiving roles in response to witnessing their parents' repeated displays of fear and helplessness. Moreover, when a young child invariably fails to live up to unrealistic expectations to provide care and nurturance for the parent, the parent may feel rejected and, in turn, project the same negative feelings and critical attitudes held by their own parents onto their child (Morris & Gould, 1963). Relatedly, Liotti (1992) has argued that a parental history of maltreatment may potentiate role confusion because a parent who struggles with unresolved trauma may lack appropriate skills for self-regulation and/or for developing and maintaining fulfilling adult relationships, which, in turn, leads to over-reliance on their child for comfort and support.

The strongest evidence that child maltreatment may increase the risk for parent-child role confusion in the next generation stems from studies of child sexual abuse (CSA). In an early study by Sroufe and Ward (1980), for example, mothers with a history of CSA were more likely to engage in a pattern of seductive role reversal with their sons. Beyond this specific form of parent-child role confusion, Burkett (1991) found that mothers who reported a history of CSA were more likely than non-abused mothers to engage in self-focused communication with their children (e.g., conversation focusing on the mother's wants and needs), and their children demonstrated more controlling behaviors (e.g., belittling, blaming) toward their mothers. These findings are consistent with more recent evidence that mothers with a history of CSA and lower marital satisfaction endorsed higher levels of parent-child role confusion and emotional overdependence on their children (Alexander et al., 2000).

Although studies have not directly tested the degree to which parents with a history of child physical abuse (CPA) enact patterns of parent-child role confusion in the next generation, early research showed that role confusion was associated with the intergenerational transmission of physical abuse (Greene, Gaines, & Sandgrund, 1974; Morris & Gould, 1963). Likewise, Cotroneo (1986) found that physically abusive parents had higher expectations of their child to fulfill the parents' needs, just as the parents had been expected to do for their own parents (i.e., the child's grandparents). These patterns are consistent with a study of college students showing that those who were physically abused as children were more likely to report enmeshed (e.g., emotionally over-involved) relationships within their families of origin than were non-abused controls (Alexander, 1990).

Finally, some theorists have noted conceptual similarities between child emotional abuse (CEA) and role confusion (Jurkovic, 1997), while others draw connections between child neglect (CN) and role confusion or parentification (Hooper, 2007). For example, adults' retrospective reports of CN and parental rejection, including the kinds of harsh and critical statements that typify CEA, are associated with their enactment of parent-child role confusion when parenting the next generation (Maysseless, Bartholomew, Henderson, & Trinke, 2004). Both theoretical and empirical works suggest role confusion may be a form of CEA in which the emotional needs of the parent take center stage while the needs of the child go unmet (Jurkovic, 1997). Likewise, evidence suggests that neglectful family systems may feature a higher occurrence of child caregiving behaviors aimed at placating or gratifying parental needs (Buchholz & Haynes, 1983).

Together, prior theory and research suggest that deficits in care during one's own childhood, particularly various forms of child maltreatment, will increase the probability that a parent will look to their child to fulfill the parent's need for support or guidance (Howes &

Cicchetti, 1993). In turn, a parent's overreliance on their child may instantiate probabilistic pathways toward maladaptation (Sroufe, 1989). Importantly, these initiating conditions may be particularly potent when parent-child role confusion occurs during early childhood because young children lack the developmental capacities to meet their own needs, let alone to provide for those of their parent (Bellow, Boris, Larrieu, Lewis, & Elliot, 2005).

Developmental consequences of early parent-child role confusion

A family system in which parent-child boundaries are diffuse or distorted puts young children at risk for the receipt of inadequate care and for the premature assumption of adult responsibilities (Kerig, 2005). Together, these stressors may tax the child's developmental capabilities at the same time they may compromise the support available to fulfill the child's own developmental needs (Nuttall & Valentino, 2017; Shaffer & Sroufe, 2005). Indeed, empirical studies identify parent-child role confusion as a risk factor for a range of negative developmental outcomes. In infancy, observations of role confusion predict higher rates of disorganized attachment and later child psychopathology (Van IJzendoorn, Schuengel, & Bakermans-Kranenburg, 1999). Extending to toddlerhood, role confusion at age 2 is associated with teacher-reported externalizing symptoms and diminished social competence in kindergarten (Macfie, Houts, et al., 2005), as well as with children's symptoms of depression and anxiety at age 7 (Jacobvitz, Hazen, Curran, & Hitchens, 2004). Likewise, observed patterns of parent-child role confusion during the preschool period are positively related to attentional problems, impulsivity, hyperactivity, and difficulties in peer relationships during elementary school (Carlson, Jacobvitz, & Sroufe, 1995; Jacobvitz et al., 2004; Sroufe, Bennett, Englund, Urban, & Shulman, 1993).

Although extant literature also documents negative effects associated with parent-child role confusion occurring in later childhood (Hetherington, 1999; Johnston, 1990) and in adolescence (Fleming & Anderson, 1986; Fullinwider-Bush & Jacobvitz, 1993), the effects of parent-child role-confusion during early childhood are particularly pronounced and pernicious for several reasons. First, as compared to later childhood and adolescence, processes of individuation and autonomy seeking are nascent during the preschool years when children remain largely dependent on their parental figures to fulfill their basic needs, support self-regulation, and guide socialization processes (Bellow et al., 2005; Jurkovic, Jessee, & Goglia, 1991; Ryan, Deci, & Grolnick, 1995). Second, given that children's capacity to adapt and make meaning of parent-child role confusion may mitigate its negative effects (Nuttall & Valentino, 2017), demands for the child to provide support or companionship to the parent are especially likely to tax young children's developmental capacities (Kerig, 2005), as compared to later in development when some degree of support from the child to the parent is to be expected (Barnett & Parker, 1998), particularly in certain contexts (e.g., immigration, poverty; DeBaryshe, Yuen, Nakamura, & Stern, 2006; Dorner, Orellana, & Jiménez, 2008; Sanchez, Esparza, Colón, & Davis, 2010). Third, as children's beliefs and expectations about relationships generalize beyond the parent-child setting to guide behavior with other social partners, early experiences of parent-child role confusion may instantiate problematic pathways that canalize over time via children's mental representations (Gottlieb, 1991; Sroufe, Egeland, & Carlson, 1999).

Children's representations of the parent-child relationship and later adaptation

Despite well-established relations between parent-child role confusion and maladaptive child outcomes, few studies have evaluated putative mechanisms that may underlie these relations. One pathway by which role confusion may influence children's adaptation is through children's representations of the role-confused relationship (Nuttall &

Valentino, 2017). According to attachment theory (e.g., Bowlby, 1969), in the context of a caregiver who is responsive and reliable, children develop representations of the caregiver as one who provides care and protection. Conversely, children who are tasked with providing care and support for caregiving figures may develop representations of caregivers as unreliable and indifferent or rejecting of the child's needs.

Children's representations of parents play an important role in development because they influence how children perceive themselves, as well as future social partners (Crittenden, 1988; Page & Bretherton, 2001). Role-confusion that begins in early childhood and undermines the child's sense of safety and autonomy may compromise the security of children's representations of the parent and the parent-child relationship (Kerig, 2005). Specifically, a child who takes on adult-like responsibilities may develop representations of the parent as negative and unjust, or as hostile and rejecting of the child's needs (Hetherington, 1999). Indeed, studies examining parent-child role confusion and children's representations of parents suggest role confusion is associated with children's negative expectations of the parent-child relationship (Leon & Rudy, 2005; Macfie & Swan, 2009).

Over time, children's representations of low parental acceptance and high parental rejection predict later maladaptation, including internalizing and externalizing symptomatology, poor school performance, lower self-esteem, and more substance abuse (Putnick et al., 2015; Rohner, Khaleque, & Courmoyer, 2005). Among older children, perceptions of unfairness in family caretaking activities are associated with more conduct problems and psychological distress (Kuperminc, Jurkovic, & Casey, 2009). Moreover, in a retrospective study, children's perceptions of unfairness in family role expectations mediated associations between parent-child role confusion and mental health symptoms (Jankowski, Hooper, Sandage, & Hannah, 2013). Thus, children's negative representations of the parent-child relationship may be one explanatory mechanism underlying the association between parent-child role confusion during the preschool period and later child maladjustment.

Study overview

Employing a fully latent structural model in a large, longitudinal sample of female caregiver-child dyads, this investigation evaluated a serial mediation model originating with the severity of parents' reported history of child maltreatment (i.e., CSA, CPA, CEA, and CN) as a hypothesized antecedent of elevated parent-child role confusion when parenting the next generation during the preschool period (i.e., child age 4). In turn, we hypothesized that parent-child role confusion would be associated with greater negativity in children's representations of the parent in middle childhood (i.e., child age 8), and psychopathological outcomes with regard to depression, anxiety, inattention, hyperactivity, and conduct problems in late childhood (i.e., child age 10). Importantly, all analyses controlled for covariates to address prior evidence that child gender, ethnicity-race, parental anxiety and depression, and children's prior adjustment influence study variables (Downey & Coyne, 1990; Ferrari, 2002; Hooper, Wallace, Doehler, & Dantzler, 2012; Khafi, Yates, & Luthar, 2014; Lansford et al., 2010; Macfie et al., 2015; Radke-Yarrow, Zahn-Waxler, Richardson, Susman, & Martinez, 1994; Sroufe, Jacobvitz, Mangelsdorf, DeAngelo, & Ward, 1985).

Method

Participants

Participants were drawn from an ongoing longitudinal study of child development among 250 preschoolers and their female caregivers (50% female children; $M_{\text{age}} = 49.04$ months, $SD = 2.95$). The children were 46% Hispanic, 18% Black, 11.2% white, 0.4% Asian, and 24.4% multiracial, and were representative of the southern California community from which they were recruited (U.S. Census Bureau, 2011).

Caregivers in the parenting role were biological mothers (91.4%), foster/adoptive mothers (3.6%), and grandmothers or other female kin (5%). The majority of caregivers were married (61.6%) or in a committed relationship (18.8%). Of the 250 dyads who completed the wave 1 assessment when the children were 4 years old, 214 (85.6%) completed a follow-up assessment at age 8 (wave 2; $M_{\text{age}} = 97.60$ months, $SD = 3.18$), and 213 (85.2%) completed a third assessment at age 10 (wave 3; $M_{\text{age}} = 115.65$ months, $SD = 3.74$). Across time, 224 dyads (89.6%) completed two or more visits. There were no significant differences on any study variables between dyads who returned for follow-up ($n = 224$) and those who did not ($n = 26$).

Procedures

Parents responded to flyers in community-based preschools and child development centers inviting participation in a longitudinal study of children's early learning and development. Participants completed a brief intake screening by phone to ensure the child was (a) between 3.9 and 4.6 years of age, (b) proficient in English, and (c) not diagnosed with a developmental disability. At each data wave, dyads completed a three-hour laboratory assessment that consisted of measures with the child, the parent, and the parent and child interacting. Parents were compensated with \$25/h of assessment, and children received a small gift after each visit. Informed consent and assent were obtained at each laboratory visit from the child's legal guardian and the child (beginning at wave 2), respectively. The human research review board of the participating university approved all study procedures.

Measures

Parents' history of maltreatment

At wave 1 (i.e., child age 4), parents provided information regarding their own experiences of child maltreatment during a verbal administration of the Early Trauma Inventory (Bremner, Vermetten, & Mazure, 2000). In the context of this structured interview, parents answered a series of increasingly specific questions regarding the details and frequency of their experiences of CSA, CPA, CEA, and CN prior to age 18. Maltreatment characteristics were coded by two independent raters who then reached consensus in accord with widely-used criteria for evaluating child maltreatment (McGee, Wolfe, Yuen, Wilson, & Carnochan, 1995). Coders rated the severity of each type of maltreatment based on its intensity and frequency across four levels, including 0 (*no occurrence*), 1 (*mild occurrence*; i.e., low/moderate intensity and low frequency), 2 (*moderate occurrence*; i.e., high intensity and low frequency or low intensity and high frequency), and 3 (*severe occurrence*; i.e., high intensity and high frequency). Severity scores for CSA ($ICC = 0.97$), CPA ($ICC = 0.90$), CEA ($ICC = 0.88$), and CN ($ICC = 0.91$) indicated a latent factor of maltreatment severity.

Parent-child role confusion

At wave 1 (i.e., child age 4), parent-child role confusion was assessed observationally during four video-recorded parent-child interaction tasks, which were adapted from Block and Block (1980) and included sorting, building, listing, and game activities that required varying levels of parental support and guidance. Coders who were naïve to other information about the family rated parent-child role confusion during each task on a 7-point scale from 1 (*absent*; i.e., completely clear parent-child roles), to 4 (*moderate*; i.e., roles begin to dissolve), to 7 (*severe*; i.e., role confusion predominates; Egeland, 1982; Sroufe et al., 1985). This scale demonstrates strong reliability and validity in prior studies (Carlson et al., 1995; Jacobvitz & Sroufe, 1987). Two independent coders scored all cases with task order counterbalanced across coders to minimize spillover effects. We averaged consensus scores across tasks to index observed parent-child role confusion ($ICC = 0.763$).

Representational measures of parent-child role confusion were obtained at wave 1 (i.e., child age 4) during the parent's five-minute speech sample (FMSS) about the parent-child relationship (Magaña-Amato, 1993). The FMSS is well-validated across diverse samples in developmental and adult psychiatric literatures (Malla, Kazarian, Barnes, & Cole, 1991; Sher-Censor, 2015). At the start of the assessment, the parent spoke for five minutes about what kind of a person their child is and how the two of them get along while being audio recorded. As detailed below, separate teams coded two different dimensions of role confusion using distinct coding protocols. Novel serial numbers identified the transcribed FMSS narratives to avoid recognition of the family.

First, as in prior work (e.g., Rogosch, Cicchetti, & Toth, 2004), coders evaluated expressions of self-sacrifice/overprotection (SSOP) using Magaña-Amato's (1993) Expressed Emotion FMSS Coding Protocol. SSOP encompasses statements reflecting attitudes and/or behaviors that are self-sacrificing (e.g., "I've had to constantly make sure I make him a priority... It takes a lot of my time, a lot of energy."), overprotective (e.g., "I wanna be close to her. I can't stand it when she's out of my sight."), lack objectivity (e.g., "Umm, he gets along with his sister, even though he tries to hit her all the time. But I think he does it because he wants to play, not because he means to."), or indicate distortions in parent-child roles (e.g., "When he gets a cold, ah, well I'm crying there with him."). Three-to-six coders rated each transcript on a 3-point scale from 0 (*absent*; 80.6%), to 1 (*borderline*; 4.84%), to 2 (*full*; 14.52%) SSOP. A separate group of coders rated a random subset of 45 cases to evaluate reliability using Hayes and Krippendorff's (2007) alpha across 5000 bootstrapped samples ($\alpha = 0.77$).

Second, as in prior work (e.g., Berzenski, Madden, & Yates, 2019), a novel group of coders evaluated mothers' expressions of boundary dissolution using the FMSS Coherence Scales (Sher-Censor & Yates, 2012), which were adapted from the Insightfulness Assessment (Koren-Karie & Oppenheim, 2004). Boundary dissolution captures aspects of role confusion that are distinct from SSOP, namely statements of role reversal/parentification in which the parent describes seeing the child as a peer (e.g., "We consider ourselves best friends."), partner (e.g., "He always notices everything. I could have just changed my earrings and he'll notice. He'll be like, 'Oh mom, how pretty.'"), or caregiver (e.g., "When I feel like a little sad or sick, he always is behind me and telling me, 'Mommy I love you. Mommy, why are you crying?'") on a 3-point scale from 0 (*absent*; 88.26%), to 1 (*minor boundary dissolution*; 9.31%), to 2 (*major boundary dissolution*; 2.43%; ICC across 25% of the cases = 0.70). Measures of observed role-confusion during the parent-child interaction, SSOP, and BD indicated a latent parent-child role confusion factor.

Children's negative representations of the parent

At wave 2 (i.e., child age 8), children's negative maternal representations were assessed using an abbreviated version of the Parental Acceptance-Rejection Questionnaire - Child Report Form (PARQ; Rohner, 1990). This measure consists of four scales that assess children's representations of parental warmth/affection (e.g., "my [parent] says nice things about me"), hostility/aggression (e.g., "my [parent] frightens or threatens me when I do something wrong"), indifference/neglect (e.g. "my [parent] ignores me when I ask for help"), and undifferentiated rejection (e.g., "my [parent] seems to dislike me"). Children rated each item on a 4-point scale from 0 (*almost never*) to 3 (*almost always*). The PARQ evidences strong reliability across culturally-diverse samples ($\alpha = 0.87$; Khaleque & Rohner, 2002a). Due to time constraints, we administered 30 items selected from the 60-item PARQ based on their relevance to the age of the current sample while ensuring adequate coverage of each subscale. Subscale mean scores for hostility/aggression (7 items; $\alpha = 0.68$), indifference/neglect (10 items; $\alpha = 0.66$), and undifferentiated rejection (5 items, $\alpha = 0.67$) indicated a latent factor of child negative maternal representation.

Child psychopathology

At wave 3 (i.e., child age 10), children reported their emotional and behavioral problems on the Diagnostic Interview Schedule for Children - IV (C-DISC; Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000). The C-DISC is a structured diagnostic interview that assesses more than 30 psychiatric disorders occurring in childhood with good reliability and validity. Each item addresses a specific symptom (e.g., "In the last year, was there a time when you often felt sad or depressed?" "Do you ever skip school?"), as well as age of onset, frequency, duration, and associated impairment. Items were coded on a 3-point scale to indicate 1 (*no*), 2 (*somewhat or sometimes*), or 3 (*yes*). Symptom counts for child depression/anxiety (i.e., a composite of 34 items), inattention/hyperactivity (i.e., a composite of 23 items), and conduct problems (i.e., a composite of 12 items) formed a latent child psychopathology factor for these analyses.

Importantly, all analyses controlled for children's prior levels of psychopathology at wave 1 (i.e., child age 4) as rated by examiners 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 to 18. Immediately after the 3-h laboratory visit at wave 1, the examiner rated the child's behavior on 125 problem items, using a 4-point scale ranging from 0 (*no occurrence*) to 3 (*definite occurrence with severe intensity*). McConaughy and Achenbach (2004) validated the TOF in a large sample of clinically referred and non-referred children from varied ethnic groups. Scaled *t*-scores for Total Child Problems controlled for prior symptomatology in these analyses in lieu of child-report measures of psychopathology for preschoolers.

Parental anxiety and depression

At wave 1 (i.e., child age 4), parents completed the Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1990), which is a 90-item self-report measure designed to assess current levels of psychological symptoms in community and clinical samples. Each item describes a psychological symptom (e.g., crying easily, trouble concentrating), which is rated on a five-point scale from 0 (*having caused no discomfort*) to 4 (*having caused extreme discomfort*) during the previous week. At wave 1, the SCL-90-R included 70 of the 90 items to conserve time. This modified measure retained all items from the anxiety and depression subscales, but did not include items from the psychosis subscales. This abbreviated SCL-90-R evidenced strong reliability in the current sample ($\alpha = 0.96$), as has the full measure in prior studies ($\alpha = 0.90$; Derogatis, 1990). Analyses controlled for a composite of anxiety and depression subscale *t*-scores.

Data preparation and analysis

Following preliminary descriptive and bivariate analyses, we evaluated the study hypotheses within a structural equation modeling (SEM) framework using the lavaan package in Rstudio. Data for all 250 participants who completed one or more assessments were retained in regression analyses, and the Full Information Maximum Likelihood (FIML) method of estimation was used to account for missing data as supported by Little's (1988) MCAR test, $\chi^2(138) = 144.691, p = .33$. In addition to missing data due to attrition across waves (see Table 1), we estimated child representations of the parent for seven cases because the child experienced a change of caregiver in the parental role from wave 1 to wave 2 (i.e., child ages 4 to 8). Regression analyses employed a robust variant of the Maximum Likelihood estimator in lavaan to account for non-normality in manifest variables (see Table 1).

A two-step identification rule (Bollen, 1989) specified the fully latent structural regression model. First, we specified the measurement model by comparing a one-factor confirmatory factor analysis (CFA) including all manifest study variables to the hypothesized four-factor CFA in

Table 1
Descriptive statistics.

	<i>N</i>	<i>M</i>	<i>SD</i>	Skew	Kurtosis
Wave 1 Variables (child age 4)					
Preschool Psychopathology	245	63.06	11.57	0.90	0.02
Parent Anxiety/Depression	244	49.24	7.54	0.73	-0.06
Parent Child Sexual Abuse History	249	0.76	1.02	0.86	-0.80
Parent Child Physical Abuse History	249	0.72	1.01	0.92	-0.72
Parent Child Emotional Abuse History	250	0.70	1.05	1.05	-0.49
Parent Child Neglect History	250	0.82	1.03	0.80	-0.82
Wave 2 Variables (child age 8)					
Observed Role Confusion	250	1.69	0.71	1.69	3.54
Narrative Self-Sacrifice	248	0.34	0.72	1.77	1.31
Overprotection					
Narrative Boundary Dissolution	247	0.14	0.42	3.02	8.68
Child Representation of Parental Hostility	199	1.45	0.47	1.13	0.82
Child Representation of Parental Indifference	199	1.53	0.41	0.51	-0.52
Child Representation of Parental Rejection	199	1.29	0.45	2.18	5.65
Wave 3 Variables (child age 10)					
Anxiety/Depression	199	4.11	2.86	0.78	-0.15
Inattention/Hyperactivity	198	2.24	2.06	0.99	0.15
Conduct Problems	197	1.59	1.92	1.41	1.77

which each latent factor was indicated by its hypothesized manifest variables (i.e., CSA, CPA, CEA, and CN indicated parents' maltreatment; observed role confusion, SSOP, and BD indicated parent-child role confusion; children's representations of parental hostility, indifference, and rejection indicated child negative representation of the parent; and anxiety/depression, inattention/hyperactivity, and conduct problems indicated child psychopathology). Second, we tested all direct and indirect effects in the identified structural model employing a bias-corrected bootstrap approach for tests of mediation. Overall model fit was determined using the root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR), and comparative fit index (CFI). Acceptable fit was defined as RMSEA values <0.07 , SRMR values <0.08 , and CFI values >0.90 (Hooper, Coughlan, & Mullen, 2008; Kline, 2015).

Results

Descriptive and bivariate statistics

Table 1 depicts descriptive data for all study variables. Parental history of child maltreatment was prominent in this sample of female caregivers with 39.2% reporting a history of CSA, 36.9% reporting a history of CPA, 34.0% reporting a history of CEA, and 44.0% reporting a history of CN. Within each subtype, a majority of the maltreated parents described moderately severe maltreatment experiences (i.e., 60.2%, 60.2%, 58.8%, and 50.9% for CSA, CPA, CEA, and CN, respectively).

Table 2 depicts bivariate relations among all study variables. At the bivariate level, parents' own history of child maltreatment severity was positively associated across subtypes (i.e., CSA, CPA, CEA, and CN). Parents' CPA severity was positively related to parent-child role confusion on the FMSS Coherence Scale, and CN severity was positively related to observed parent-child role confusion and to children's negative representations of parental hostility, indifference, and rejection. Observed and narrative indicators of parent-child role confusion were positively associated. Narrative measures of role confusion were positively associated with children's later representations of parental hostility and indifference at age 8, and all measures of children's negative representation of the parent evidenced positive concurrent associations with one another. Children's representations of parental hostility and indifference were positively correlated with child depression/anxiety, inattention/hyperactivity, and conduct problems at age 10. Child

Table 2
Bivariate correlations among study variables.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Preschool Psychopathology	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2. Parent Anxiety/Depression	0.03	–	–	–	–	–	–	–	–	–	–	–	–	–
3. Parent Child Sexual Abuse History	–0.15*	0.24**	–	–	–	–	–	–	–	–	–	–	–	–
4. Parent Child Physical Abuse History	–0.12	0.25**	0.30**	–	–	–	–	–	–	–	–	–	–	–
5. Parent Child Emotional Abuse History	0.01	0.25**	0.21**	0.41**	–	–	–	–	–	–	–	–	–	–
6. Parent Child Neglect History	0.03	0.25**	0.21**	0.33**	0.43**	–	–	–	–	–	–	–	–	–
7. Observed Role Confusion	0.18**	–0.02	0.07	0.09	0.09	0.15*	–	–	–	–	–	–	–	–
8. Narrative Self-Sacrifice Overprotection	0.09	0.08	0.03	0.10	0.11	0.11	0.17**	–	–	–	–	–	–	–
9. Narrative Boundary Dissolution	0.04	–0.03	0.01	0.21**	0.09	0.04	0.22**	0.42**	–	–	–	–	–	–
10. Child Rep. of Parental Hostility	0.11	0.07	0.08	–0.04	0.02	0.21**	0.09	0.14*	0.15*	–	–	–	–	–
11. Child Rep. of Parental Indifference	0.18*	0.00	0.03	–0.08	0.05	0.18*	0.10	0.11	0.13	0.62**	–	–	–	–
12. Child Rep. of Parental Rejection	0.18*	0.08	–0.05	–0.04	–0.05	0.16*	0.12	0.15*	0.12	0.55**	0.54**	–	–	–
13. Anxiety/Depression	0.01	0.02	0.00	0.08	–0.05	–0.02	0.00	–0.03	–0.04	0.17*	0.17*	0.14	–	–
14. Inattention/Hyperactivity	–0.07	0.03	0.01	0.08	0.03	0.01	0.03	0.07	–0.05	0.26**	0.17*	0.14	0.73**	–
15. Conduct Problems	–0.02	0.02	0.02	0.03	–0.04	0.01	0.01	0.12	–0.06	0.18*	0.16*	0.10	0.56**	0.63**

Note. *p < .05, **p < .01.

psychopathology measures at age 10 were positively associated across syndromes (i.e., depression/anxiety, inattention/hyperactivity, and conduct problems). Regarding covariates, parental anxiety/depression was positively correlated with all subtypes of parental maltreatment severity. Child psychopathology at age 4 was negatively associated with parental CSA severity, but positively associated with observed parent-child role confusion and children’s representations of parental indifference and rejection.

Measurement model

An initial measurement model analyzed a standard one-factor CFA model with all 13 manifest indicators included. The hypothesized four-factor CFA included three manifest indicators per latent factor, with the

exception of parental maltreatment severity, which included four manifest indicators (see Fig. 1). As expected, fit for the hypothesized four-factor CFA, $\chi^2(59) = 65.72, p = .26, RMSEA [95\% CI] = 0.02 [0.00, 0.05], SRMR = 0.04, CFI = 0.99$, showed significant improvement over the one-factor CFA, $\chi^2(65) = 467.12, p < .01, RMSEA [95\% CI] = 0.16 [0.14, 0.17], SRMR = 0.13, CFI = 0.38$, as indicated by the chi-square difference test, $\chi^2(6) = 401.39, p < .001$. All factor loadings in the four-factor CFA were statistically significant, and there were no cross loadings (see Fig. 1). Thus, we retained the hypothesized four-factor measurement model.

Serial mediation analysis

Table 3 depicts results of the structural regression model evaluating

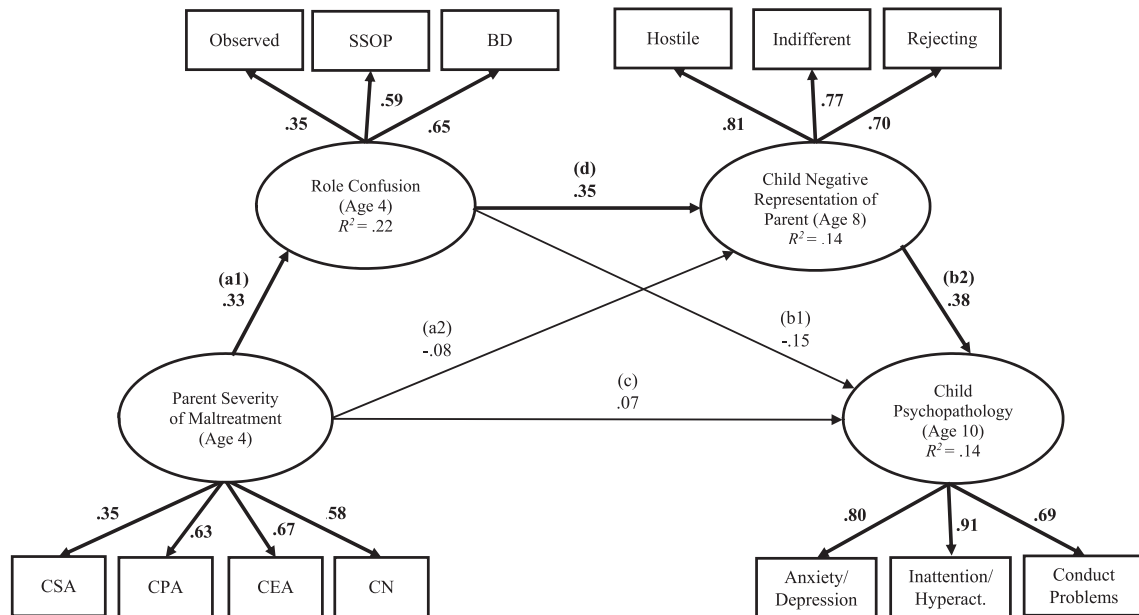


Fig. 1. Final serial mediation model showing relations from a parental history of child maltreatment to child psychopathology in the next generation through parent-child role confusion and the child’s negative representation of the parent. CSA = child sexual abuse. CPA = Child physical abuse. CEA = Child emotional abuse. CN = Child neglect. Hyperact = Hyperactivity. Covariates and error variances not shown for clarity. All bolded paths are significant at p < .01.

Table 3
Standardized parameter estimates for the final SEM.

	β	SE	p	95% Bias-Corrected CI	
				LL	UL
Parent-child role confusion on:					
Parent maltreatment severity (a1)	.33	.13	.01	.08	.57
Preschool psychopathology	.20	.08	.01	.05	.35
Parent anxiety/depression	-.06	.07	.39	-.20	.08
Child gender	.26	.08	.00	.11	.41
Race/ethnicity	.06	.08	.45	-.10	.22
Child negative representation of the parent on:					
Parent maltreatment severity (a2)	-.08	.10	.43	-.28	.12
Parent-child role confusion (d)	.35	.14	.01	.08	.61
Parent anxiety/depression	.07	.08	.42	-.10	.23
Child gender	.09	.08	.27	-.07	.25
Race/ethnicity	.09	.08	.28	-.07	.24
Child psychopathology on:					
Parent-child role confusion (b1)					
Child negative representation (b2)	-.15	.13	.25	-.41	.11
Parent maltreatment severity (c)	.38	.09	.00	.21	.55
Preschool psychopathology	.07	.11	.52	-.15	.30
Parent anxiety/depression	-.07	.08	.41	-.22	.09
Child gender	-.00	.09	.98	-.17	.17
Race/ethnicity	.03	.08	.68	-.12	.18
	-.04	.08	.56	-.19	.10
Total R^2	0.14				
Cohen's f^2	0.16				

Note. CI = confidence interval; LL = lower limit; UL = upper limit. Gender coded 0 (male) and 1 (female). Race/ethnicity coded 0 (non-Latinx) and 1 (Latinx).

direct and indirect effects from the severity of parents' own history of child maltreatment as reported at child age 4 to child psychopathology at age 10 through parent-child role confusion at age 4 and children's negative representation of the parent at age 8. We evaluated tests of indirect effects across 10,000 bootstrap samples with estimates of test statistics using 95% bias-corrected confidence intervals. All regression paths controlled for parent psychopathology, child gender, and ethnicity-race. In addition, all paths to child psychopathology controlled for children's prior psychopathology at age 4. Finally, due to the possibility of bidirectional child effects, the path from parents' maltreatment severity to parent-child role confusion controlled for children's psychopathology at age 4.

Fig. 1 presents standardized path coefficients and standard errors for the hypothesized serial mediation model. Lavaan converged normally after 128 iterations, and model fit was acceptable, RMSEA [95% CI] = 0.05 [0.04, 0.06], SRMR = 0.06, CFI = 0.91. Higher severity of parents' own history of maltreatment during childhood was associated with elevated parent-child role confusion in the next generation, and parent-child role confusion at age 4 was associated with children's negative representations of the parent as hostile, indifferent, or rejecting at age 8. Further, children's negative representations of the parent were associated with higher rates of child psychopathology at age 10.

As hypothesized, there was a significant indirect effect of parents' severity of child maltreatment on child psychopathology through parent-child role confusion and children's negative representations of the parent, indicating serial mediation ($X \rightarrow M1 \rightarrow M2 \rightarrow Y$), standardized effect [95% CI] = 0.04 [0.001, 0.09], $p = .05$. However, neither the indirect effects from parents' severity of child maltreatment to parent-child role confusion to child psychopathology ($X \rightarrow M1 \rightarrow Y$) nor the path from parents' severity of child maltreatment to children's negative representations to child psychopathology ($X \rightarrow M2 \rightarrow Y$) attained significance, standardized effect [95% CI] = -0.05 [-0.14, 0.04], $p = .26$, and standardized effect [95% CI] = -0.03 [-0.11, 0.05], $p = .44$, respectively. Likewise, the direct effect from parents' severity of

child maltreatment to child psychopathology ($X \rightarrow Y$) was not significant, standardized effect [95% CI] = 0.07 [-0.15, 0.30], $p = .52$. Taken together, the total model evidenced a medium-sized effect ($f^2 = 0.16$; Selya, Rose, Dierker, Hedeker, & Mermelstein, 2012).

Discussion

This prospective investigation advances the literatures on trans-generational maltreatment effects and parent-child role confusion by documenting the influence of caregiver's own history of maltreatment on parent-child role confusion in the next generation and evaluating a representational pathway by which role-confusion can undermine children's psychological and behavioral adjustment over time. Consistent with study hypotheses, greater severity of parents' own history of child maltreatment was associated with higher levels of role confusion when parenting the next generation. Further, parent-child role confusion during the preschool period (i.e., child age 4) was associated with children's negative representations of the parent in middle-childhood (i.e., child age 8), which, in turn, were associated with elevations in children's psychopathology in late childhood (i.e., child age 10). Tests of indirect effects revealed parent-child role confusion and children's negative representations of the parent as hostile, indifferent, or rejecting serially mediated the path from parents' severity of maltreatment to child psychopathology. These findings clearly implicate parent-child relational processes in transgenerational maltreatment effects, and speak to the potential power of structural family systems approaches for effective prevention and intervention efforts.

Parent-child role confusion emerged as one mechanism by which a parent's own history of child maltreatment negatively impacts adaptation in the next generation. The current findings support the tenets of attachment theory wherein experiences of childhood vulnerability and lack of protection are thought to undermine the quality of parent-child relationships in the next generation (Bowlby, 1973; Hesse & Main, 1999). A parent's own history of child maltreatment may lead to distorted representations of caregiving and the parent-child relationship, heightened vulnerability to environmental stressors, and a tendency to look toward one's own child(ren) to fulfill unmet needs from childhood (George & Solomon, 2011; Howes & Cicchetti, 1993; Liotti, 1992; Macfie et al., 2015).

In turn, children's own experiences of parent-child role confusion were associated with their representations of the parent as hostile, indifferent, or rejecting, and these negative representations appear to carry forward across time and settings in ways that undermine children's later emotional and behavioral adaptation (Bowlby, 1973; Bretherton & Munholland, 2008). These findings are consistent with prior suggestions that children who feel burdened by the need to provide their parent with companionship or support and/or who feel restricted from pursuing developmentally appropriate interests and relationships perceive the parent-child relationship as negative or unfair (Hetherington, 1999; Jurkovic, 1997). Consistent with prior evidence that children's representations of parental rejection are associated with a range of negative developmental outcomes, such as internalizing and externalizing symptomatology, poor school performance, and lower self-esteem (Khaleque & Rohner, 2002b; Putnick et al., 2015; Rohner et al., 2005), the current study also documented a positive association between children's negative representations of their parent and later child psychopathology.

At the same time this study elucidates a pathway by which maltreatment effects carry across generations, it also highlights the complexity of parent-child role confusion effects on development. Development is not deterministic, and single risk factors rarely account for psychopathological outcomes fully (Cicchetti & Blender, 2004). The absence of a significant effect from parent-child role confusion to child psychopathology suggests that role confusion may be associated with a range of developmental outcomes (i.e., multifinality; Cicchetti & Rogosch, 1996) and highlights the need for further research to identify

factors that may moderate the impact of role confusion on child development. Some evidence shows that role-confused parent-child relationships can be overstimulating, interfere with a child's development of self-regulation, and restrict age-appropriate exploration (Kerig, 2005). For example, the literature on enmeshment suggests that children may find it difficult to assert autonomy and individuality when a parent's need for emotional support supersedes the child's developmental needs, leading children to develop heightened anxiety, insecurity, and an external locus of control (Jacobvitz et al., 2004; Jewell & Stark, 2003). However, Jurkovic (1997) has argued that appropriate and fair family obligations may facilitate the development of self-worth in children, even when they require the child to adopt more adult-like roles, such as providing care for younger siblings or taking on household responsibilities. In these contexts, rather than perceiving the parent-child relationship as hostile or rejecting, some children may perceive a role-confused relationship with their parent as positive, warm, and close (Arditti, 1999). Indeed, when children perceive positive relationships with parents, added responsibilities may promote a sense of competence and pride because the child sees themselves as being able to contribute to family well-being (Barnett & Parker, 1998; Peris & Emery, 2005; Tompkins, 2007). Importantly, other research suggests that children may evidence differential outcomes based on the emotional versus instrumental nature of role confusion, with more adverse outcomes resulting when parents expect emotional support from children (Chen & Panebianco, 2019). Similarly, the level or degree of parent-child role confusion may influence child outcomes. For example, Hetherington (1999) found that emotional role confusion was associated with children's support and sympathy toward the parent at moderate levels, but children felt increasingly burdened and resentful toward parents and experienced more anxiety and depression at higher levels of emotional role confusion.

Despite the likelihood that parent-child role confusion may be associated with divergent developmental pathways, it is important to recognize that the appearance of proximal positive outcomes of parent-child role confusion does not negate the possibility of negative sleeper effects. Kerig (2005) has raised concerns that children who appear to be faring well in contexts of high parent-child role confusion may face hidden costs in later development. This assertion is consistent with recent research suggesting that children who evidence better-than-expected adjustment in contexts of adversity (i.e., resilience) may experience diminished functioning concurrently or subsequently in other domains (Brody, Yu, Miller, & Chen, 2016; Rudd, Doan, & Yates, 2019). Although naïve observers may perceive role-confused parent-child relationships as loving (e.g., parent frequently requesting kisses from a child) or playful (e.g., parent and child teasing one another and laughing as peers), and their children may appear precociously mature and competent (Kerig, 2005), the negative effects of these early distortions in parent-child roles may emerge as late as young adulthood (Allen & Hauser, 1996). There is an ongoing need for prospective investigations of parent-child role confusion that extend from childhood to adulthood to clarify shifting or delayed effects of parent-child role confusion on development.

Strengths and limitations

To our knowledge, this is the first empirical investigation of both the etiology and developmental consequences of parent-child role confusion. Bolstered by a rigorous longitudinal research design with multiple measures and informants, the current findings suggest that transgenerational maltreatment effects may include disturbances in parent-child boundaries and highlight the role of children's representations of the parent-child relationship following role confusion in the emergence of child psychopathology. Notwithstanding these contributions, we must consider several limitations when evaluating the implications of these findings.

First, the current analyses evaluated a latent maltreatment construct

consisting of CSA, CPA, CEA, and CN to assess parents' history of child maltreatment. Although this global maltreatment construct offered a robust approach for evaluating maltreatment severity as an etiological factor in the expression of parent-child role confusion, combining maltreatment types precluded our examination of subtype-specific pathways and mechanisms underlying transgenerational maltreatment effects on parenting and child adaptation (Berzenski, Yates, & Egeland, 2014).

Second, these analyses used an abbreviated form of the Parental Acceptance and Rejection Questionnaire (PARQ) to measure child representations of the parent, which may have influenced the obtained findings in ways that cannot be evaluated. This modified measure consisted of 30 items selected from the original 60-item PARQ based on their relevance to the age of the current sample while ensuring adequate coverage of each subscale. Attendant with this reduction in items, the obtained reliabilities for each subscale were somewhat lower than those observed in prior studies with young children (Khaleque & Rohner, 2002b). Although the PARQ evidences excellent reliability and validity across diverse samples (Khaleque & Rohner, 2002a), the obtained findings await replication using the full measure.

Third, this study was limited to the evaluation of role confusion within parent-child dyads with female caregivers. Future research should consider the influence of children's relationships with multiple caregivers, including mothers and fathers, as well as extended kin caregivers. Given research suggesting that role confusion may occur with one parent but not the other (Jacobvitz & Bush, 1996; Kerig, 2005), its negative effects may be magnified for a child with multiple role-confused caregiving relationships or minimized for a child who experiences clear and appropriate boundaries with a second parent or alternate caregiver. Parent-child role confusion may also differ in expression and effects based on the gender of the parent and/or child (Hazen, Jacobvitz, & McFarland, 2005; Jacobvitz, Morgan, Kretchmar, & Morgan, 1991; Macfie, Houts, et al., 2005; Sroufe et al., 1985). Thus, future research should explore differences in the nature and effect of parent-child role confusion among mother- and father-child dyads, among same- versus opposite-gender parent-child dyads, and among relationships in the broader family system (e.g., multiple caregivers, siblings). Similarly, the effect of role confusion on development may vary over time. Parent-child role confusion that is short term, begins after the preschool period, and is associated with temporary family factors (e.g., transient illness) may not present children with the same developmental challenges as persistent parent-child role confusion that begins early in development (Jurkovic et al., 1991; Kerig, 2005). Future longitudinal investigations following children into adulthood are necessary for understanding the stability and impact of parent-child role confusion across developmental periods (Nuttall & Valentino, 2017).

Fourth, future investigations will benefit from more comprehensive research designs than we were able to implement in this investigation. Testing indirect effects through serial mediation may produce biased estimates compared to longitudinal models that measure all constructs at all time points to support autoregressive controls (Mitchell & Maxwell, 2013). An ecological-transactional model of parent-child role confusion holds that development and adaptation are shaped by bidirectional influences of risk and protective processes operating across levels of ecology (Cicchetti & Valentino, 2006; Nuttall & Valentino, 2017). Indeed, the significant relation between preschoolers' psychopathology and parent-child role confusion at age 4 in this study may reflect these bidirectional processes. However, a fully cross-lagged mediation model is needed to capture directional relations from a parental history of child maltreatment to child psychopathology in the next generation via parent-child role confusion and child representations of the parent.

Finally, parent-child role confusion often co-occurs with other psychosocial risks, such as child maltreatment (i.e., CSA, CPA, and CEA), inadequate care (i.e., CN), parental anxiety and depression, and divorce (Peris & Emery, 2005; Radke-Yarrow, Zahn-Waxler, Richardson,

Susman & Martinez, 1994; Shaffer & Sroufe, 2005). However, the current investigation did not consider children's experiences of maltreatment beyond parent-child role confusion. Likewise, although the current analyses controlled for parental anxiety and depression, which emerged as a correlate of parents' history of maltreatment, future studies should examine the role of additional risk and protective factors in and beyond the family system (e.g., single parent status, family violence, social support). Indeed, children's adjustment outcomes may depend on the cumulative impact of parent-child role confusion and co-occurring risks as situated within broader family and community contexts.

Implications

The current study revealed a medium-sized effect of a parent's history of child maltreatment on their own child's psychopathology in later childhood (i.e., child age 10) via the expression of parent-child role-confusion during the preschool period (i.e., child age 4) and children's negative representations of the parent as hostile, indifferent, or rejecting in middle childhood (i.e., child age 8). Thus, this work has significant potential to inform risk assessment, prevention, and intervention efforts for families with young children.

Parents struggling with a history of maltreatment may be at heightened risk for role confusion with their own children. When parents have experienced maltreatment during their own childhoods, therapy can help them process their experiences of trauma and explore mental representations of past and present attachment relationships (Lieberman, 1992). By increasing parents' insight into their own childhood experiences with inadequate safety and protection, attachment-based and trauma-informed interventions may help parents move toward more adaptive working models of the parent-child relationship and increase their understanding, acceptance, and fulfillment of their child(ren)'s needs and feelings (Erickson, Korfmacher, & Egeland, 1992). Ultimately, therapy may support parents to resolve experiences of childhood trauma so that they can shift from a position of needing care and protection to a position of providing care and protection for their own children.

Additionally, the gradual modification of generational boundaries and expectations is central to effective interventions with role-confused families (Glenwick & Mowrey, 1986). Parents may need support to (re) establish family hierarchies, (re)set developmentally appropriate limits and controls on children, and (re)gain a sense of confidence and autonomy in parenting. Parenting-focused treatment can support parents to process their experiences and expectations of being in the parental role and to explore potential feelings of guilt and uncertainty around parenting. Structural therapy approaches (Minuchin, 1974), which emphasize family hierarchies and subsystems, can empower parents to act as "executives" and resolve interparental conflict while de-triangulating children and returning them to the sibling subsystem. However, seminal family therapy research (e.g., Minuchin, 1974) also suggests that the reorganization of family boundaries can be difficult and upsetting for children who are comfortable in their established roles (Garber, 2011). Thus, efforts to modify entrenched boundaries should be initiated gradually and carefully with an eye toward evaluating potentially iatrogenic effects as a result of destabilizing the family system. Strength-based treatments that recognize and reinforce parents' accomplishments and appropriate parent-child interactions may help parents who struggle to assert authority (Allison et al., 2003). Further, parents may be encouraged to develop or enhance adult social support networks (e.g., friends, support groups) that can help them to restore psychological boundaries and move away from emotional and/or instrumental overreliance on their children (Byng-Hall, 2002; Glenwick & Mowrey, 1986).

The current findings also suggest that children's representations of the parent-child relationship may be an important marker of risk and, by extension, target for treatment. Assessing children's representations of the parent-child relationship generally, and particularly in families with

role confusion, may alert practitioners to the need for treatment at multiple levels of the family system. Children's representations and perceptions are related to their lived experiences, and children may benefit from having their feelings and perceptions of parent-child role confusion legitimized during therapy, or, during later stages of treatment, verbalized by the child to ensure their thoughts and feelings are expressed to parents in family therapy sessions (Glenwick & Mowrey, 1986).

In summary, the results of this study provide evidence that child maltreatment effects can carry across generations to influence parenting in ways that may not be abjectly abusive (e.g., role-confused parent-child dynamics), but are nevertheless damaging to child adjustment outcomes. Notably, these findings also indicate that children's representations and interpretations of parent-child role confusion may play an important role in determining its impact on adaptation. Given the enduring capacity for change and resilience in the face of adversity, the current findings should inform and encourage multi-faceted efforts to mitigate risk and promote positive development for both children and their parents.

CRedit authorship contribution statement

Linnea B. Linde-Krieger: Conceptualization, Investigation, Methodology, Formal analysis, Writing - original draft, Writing - review & editing. **Tuppert M. Yates:** Conceptualization, Investigation, Methodology, Writing - original draft, Writing - review & editing, Supervision, Funding acquisition.

Declaration of Competing Interest

None

Acknowledgements

This research was supported by the National Institute of Health Grant 1R03HD065036-01A and the National Science Foundation Grant 0951775 awarded to Tuppert M. Yates.

References

- Alexander, P. C. (1990). *Fusion and triangulation in college students physically abused in childhood*. Unpublished manuscript. College Park, MD: University of Maryland College Park.
- Alexander, P. C., Teti, L., & Anderson, C. L. (2000). Childhood sexual abuse history and role reversal in parenting. *Child Abuse & Neglect, 24*(6), 829–838.
- Allen, J. P., & Hauser, S. T. (1996). Autonomy and relatedness in adolescent-family interactions as predictors of young adults' states of mind regarding attachment. *Development and Psychopathology, 8*(4), 793–809.
- Allison, S., Stacey, K., Dadds, V., Roeger, L., Wood, A., & Martin, G. (2003). What the family brings: Gathering evidence for strengths-based work. *Journal of Family Therapy, 25*(3), 263–284.
- Arditti, J. A. (1999). Rethinking relationships between divorce mothers and their children: Capitalizing on family strengths. *Family Relations, 48*(2), 109–119.
- Barnett, B., & Parker, G. (1998). The parentified child: Early competence or childhood deprivation? *Child Psychology & Psychiatry Review, 3*(4), 146–155.
- Bellow, S. M., Boris, N. W., Larrieu, J. A., Lewis, M. L., & Elliot, A. (2005). Conceptual and clinical dilemmas in defining and assessing role reversal in young child-caregiver relationships. *Journal of Emotional Abuse, 5*(2–3), 43–66.
- Berzenski, S. R., Madden, A. R., & Yates, T. M. (2019). Childhood emotional abuse characteristics moderate associations with adult psychopathology and caregiving. *Child Abuse & Neglect, 87*, 77–87.
- Berzenski, S., Yates, T. M., & Egeland, B. (2014). A multidimensional view of continuity in intergenerational transmission of child maltreatment. In J. Korbin, & J. Krugman (Eds.), *Handbook of child maltreatment* (pp. 115–129). Dordrecht, Netherlands: Springer.
- Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W. A. Collins (Ed.), *Vol. 13. Minnesota symposia on child psychology* (pp. 39–101). Hillsdale, NJ: Erlbaum.
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods & Research, 17*(3), 303–316.
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York, NY: Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger*. New York, NY: Basic Books.

- Bowlby, J. (1980). *Attachment and loss: Vol. 3. Loss: Sadness and depression*. New York, NY: Basic Books.
- Bremner, J. D., Vermetten, E., & Mazure, C. M. (2000). Development and preliminary psychometric properties of an instrument for the measurement of childhood trauma: The Early Trauma Inventory. *Depression and Anxiety, 12*(1), 1–12.
- Bretherton, L., & Munholland, K. A. (2008). Internal working models in attachment relationships: Elaborating a central construct in attachment theory. In J. Cassidy, & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 102–127). New York, NY: Guilford Press.
- Brody, G. H., Yu, T., Miller, G. E., & Chen, E. (2016). Resilience in adolescence, health, and psychosocial outcomes. *Pediatrics, 138*(6), Article e20161042.
- Buchholz, E. S., & Haynes, R. (1983). Sometimes I feel like a motherless child: Role reversal as a form of parental neglect. *Dynamic Psychotherapy, 1*(2), 99–107.
- Burkett, L. P. (1991). Parenting behaviors of women who were sexually abused as children in their families of origin. *Family Process, 30*(4), 421–434.
- Byng-Hall, J. (2002). Relieving parentified children's burdens in families with insecure attachment patterns. *Family Process, 41*(3), 375–388.
- Carlson, E. A., Jacobvitz, D., & Sroufe, L. A. (1995). A developmental investigation of inattentiveness and hyperactivity. *Child Development, 66*(1), 37–54.
- Chen, C. Y. C., & Panebianco, A. (2019). Physical and psychological conditions of parental chronic illness, parentification and adolescent psychological adjustment. *Psychology & Health, 35*(9), 1075–1094. Advance online publication.
- Cicchetti, D., & Blender, J. A. (2004). A multiple-levels-of-analysis approach to the study of developmental processes in maltreated children. *Proceedings of the National Academy of Sciences, 101*(50), 17325–17326.
- Cicchetti, D., & Rogosch, F. A. (1996). Equifinality and multifinality in developmental psychopathology. *Development and Psychopathology, 8*(4), 597–600.
- Cicchetti, D., & Valentino, K. (2006). An ecological-transactional perspective on child maltreatment: Failure of the average expectable environment and its influence on child development. In D. Cicchetti, & D. J. Cohen (Eds.), *Developmental psychopathology: Risk, disorder, and adaptation* (pp. 129–201). Inc: John Wiley & Sons.
- Cotroneo, M. (1986). Families and abuse: A contextual approach. In M. A. Karpel (Ed.), *Family resources: The hidden partner in family therapy* (pp. 413–437). New York, NY: Guilford Press.
- Crittenden, P. M. (1988). Distorted patterns of relationship in maltreating families: The role of internal representational models. *Journal of Reproductive and Infant Psychology, 6*(3), 183–199.
- DeBaryshe, B. D., Yuen, S., Nakamura, L. N., & Stern, I. R. (2006). The roles of family obligation and parenting practices in explaining the well-being of native Hawaiian adolescents living in poverty. *Hūlili: Multidisciplinary Research on Hawaiian Well-Being, 3*(1), 103–126.
- Derogatis, L. (1990). *SCL-90-administration, R. Scoring and procedures manual*. Baltimore, MD: Clinical Psychometric Research.
- Dorner, L. M., Orellana, M. F., & Jiménez, R. (2008). "It's one of those things that you do to help the family": Language brokering and the development of immigrant adolescents. *Journal of Adolescent Research, 23*(5), 515–543.
- Downey, G., & Coyne, J. C. (1990). Children of depressed parents: An integrative review. *Psychological Bulletin, 108*(1), 50.
- Egeland, B. (1982). *42-month teaching task code manual*. Minneapolis, MN: University of Minnesota.
- Erickson, M. F., Korfmacher, J., & Egeland, B. R. (1992). Attachments past and present: Implications for therapeutic intervention with mother-infant dyads. *Development and Psychopathology, 4*(4), 495–507.
- Ferrari, A. M. (2002). The impact of culture upon child rearing practices and definitions of maltreatment. *Child Abuse & Neglect, 26*(8), 793–813.
- Fleming, W. M., & Anderson, S. A. (1986). Individuation from the family and personal adjustment in late adolescence. *Journal of Marital and Family Therapy, 12*(3), 311–315.
- Fullinwider-Bush, N. E. L. L., & Jacobvitz, D. B. (1993). The transition to young adulthood: Generational boundary dissolution and female identity development. *Family Process, 32*(1), 87–103.
- Garber, B. D. (2011). Parental alienation and the dynamics of the enmeshed parent-child dyad: Adultification, parentification, and infantilization. *Family Court Review, 49*(2), 322–335.
- George, C., & Solomon, J. (2011). Caregiving helplessness: The development of a screening measure for disorganized caregiving. In J. Solomon, & C. George (Eds.), *Disorganized attachment and caregiving* (pp. 133–166). New York, NY: Guilford Press.
- Glenwick, D. S., & Mowrey, J. D. (1986). When parent becomes peer: Loss of intergenerational boundaries in single parent families. *Family Relations, 35*(1), 57–62.
- Gottlieb, G. (1991). Experiential canalization of behavioral development: Theory. *Developmental Psychology, 27*(1), 4–13.
- Greene, A. H., Gaines, R. W., & Sandgrund, A. (1974). Child abuse: Pathological syndrome of family interaction. *American Journal of Psychiatry, 131*(8), 882–886.
- Hayes, A. F., & Krippendorff, K. (2007). Answering the call for a standard reliability measure for coding data. *Communication Methods and Measures, 1*(1), 77–89.
- Hazen, N., Jacobvitz, D., & McFarland, L. (2005). Antecedents of boundary disturbances in families with young children: Intergenerational transmission and parent-infant caregiving patterns. *Journal of Emotional Abuse, 5*(2-3), 85–110.
- Hesse, E., & Main, M. (1999). Second-generation effects of unresolved trauma in nonmaltreating parents: Dissociated, frightened, and threatening parental behavior. *Psychoanalytic Inquiry, 19*(4), 481–540.
- Hetherington, E. M. (1999). Should we stay together for the sake of the children? In E. M. Hetherington (Ed.), *Coping with divorce, single parenting, and remarriage: A risk and resiliency perspective* (pp. 93–116). Mahwah, NJ: Erlbaum.
- Hooper, L. (2007). Expanding the discussion regarding parentification and its varied outcomes: Implications for mental health research and practice. *Journal of Mental Health Counseling, 29*(4), 322–337.
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods, 6*(1), 53–60.
- Hooper, L. M., Wallace, S. A., Doehler, K., & Dantzer, J. (2012). Parentification, ethnic identity, and psychological health in black and white American college students: Implications of family-of-origin and cultural factors. *Journal of Comparative Family Studies, 43*(6), 811–835.
- Howes, P. W., & Cicchetti, D. (1993). A family/relational perspective on maltreating families: Parallel processes across systems and social policy implications. In D. Cicchetti, & S. L. Toth (Eds.), *Child abuse, child development, and social policy* (pp. 249–300). Norwood, NJ: Ablex.
- Jacobvitz, D. B., & Bush, N. F. (1996). Reconstructions of family relationships: Parent-child alliances, personal distress, and self-esteem. *Developmental Psychology, 32*(4), 732–743.
- Jacobvitz, D., Hazen, N., Curran, M., & Hitchens, K. (2004). Observations of early triadic family interactions: Boundary disturbances in the family predict symptoms of depression, anxiety, and attention-deficit/hyperactivity disorder in middle childhood. *Development and Psychopathology, 16*(3), 577–592.
- Jacobvitz, D. B., Morgan, E., Kretchmar, M. D., & Morgan, Y. (1991). The transmission of mother-child boundary disturbances across three generations. *Development and Psychopathology, 3*(4), 513–527.
- Jacobvitz, D., & Sroufe, L. A. (1987). The early caregiver-child relationship and attention-deficit disorder with hyperactivity in kindergarten: A prospective study. *Child Development, 58*(6), 1496–1504.
- Jankowski, P. J., Hooper, L. M., Sandage, S. J., & Hannah, N. J. (2013). Parentification and mental health symptoms: Mediator effects of perceived unfairness and differentiation of self. *Journal of Family Therapy, 35*(1), 43–65.
- Jewell, J. D., & Stark, K. D. (2003). Comparing the family environments of adolescents with conduct disorder or depression. *Journal of Child and Family Studies, 12*(1), 77–89.
- Johnston, J. R. (1990). Role diffusion and role reversal: Structural variations in divorced families and children's functioning. *Family Relations, 39*(4), 405–413.
- Jurkovic, G. J. (1997). *Lost childhoods: The plight of the parentified child*. New York, NY: Brunner/Mazel.
- Jurkovic, G. J., Jessee, E. H., & Goglia, L. R. (1991). Treatment of parental children and their families: Conceptual and technical issues. *American Journal of Family Therapy, 19*(4), 302–314.
- Kerig, P. K. (2005). Revisiting the construct of boundary dissolution: A multidimensional perspective. *Journal of Emotional Abuse, 5*(2-3), 5–42.
- Khafi, T. Y., Yates, T. M., & Luthar, S. S. (2014). Ethnic differences in the developmental significance of parentification. *Family Process, 53*(2), 267–287.
- Khaleque, A., & Rohner, R. P. (2002a). Reliability of measures assessing the pancultural association between perceived parental acceptance-rejection and psychological adjustment: A meta-analysis of cross-cultural and intracultural studies. *Journal of Cross-Cultural Psychology, 33*(1), 87–99.
- Khaleque, A., & Rohner, R. P. (2002b). Perceived parental acceptance-rejection and psychological adjustment: A meta-analysis of cross-cultural and intracultural studies. *Journal of Marriage and Family, 64*(1), 54–64.
- Kline, R. B. (2015). *Principles and practice of structural equation modeling* (4th ed.). New York, NY: Guilford.
- Koren-Karie, N., & Oppenheim, D. (2004). *Insightfulness procedure administration and coding manual*. Unpublished manuscript. Haifa, Israel: University of Haifa.
- Kuperminc, G., Jurkovic, G., & Casey, S. (2009). Relation of filial responsibility to the personal and social adjustment of Latino adolescents from immigrant families. *Journal of Family Psychology, 23*(1), 14–22.
- Lansford, J. E., Malone, P. S., Dodge, K. A., Chang, L., Chaudhary, N., Tapanya, S., ... Deater-Deckard, K. (2010). Children's perceptions of maternal hostility as a mediator of the link between discipline and children's adjustment in four countries. *International Journal of Behavioral Development, 34*(5), 452–461.
- Leon, K., & Rudy, D. (2005). Family processes and children's representations of parentification. *Journal of Emotional Abuse, 5*(2-3), 111–142.
- Lieberman, A. F. (1992). Infant-parent psychotherapy with toddlers. *Development and Psychopathology, 4*(4), 559–574.
- Liotti, G. (1992). Disorganized/disoriented attachment in the etiology of the dissociative disorders. *Dissociation, 5*(4), 196–204.
- Little, R. J. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association, 83*(404), 1198–1202.
- Macfie, J., Brumariu, L. E., & Lyons-Ruth, K. (2015). Parent-child role-confusion: A critical review of an emerging concept. *Developmental Review, 36*, 34–57.
- Macfie, J., Houts, R. M., McElwain, N. L., & Cox, M. J. (2005). The effect of father-toddler and mother-toddler role reversal on the development of behavior problems in kindergarten. *Social Development, 14*(3), 514–531.
- Macfie, J., McElwain, N. L., Houts, R. M., & Cox, M. J. (2005). Intergenerational transmission of role reversal between parent and child: Dyadic and family systems internal working models. *Attachment & Human Development, 7*(1), 51–65.
- Macfie, J., & Swan, S. A. (2009). Representations of the caregiver-child relationship and of the self, and emotion regulation in the narratives of young children whose mothers have borderline personality disorder. *Development and Psychopathology, 21*(3), 993–1011.
- Magaña-Amato, A. (1993). *Manual for coding expressed emotion from the five-minute speech sample: UCLA family project*. Los Angeles, CA: University of California.

- Malla, A. K., Kazarian, S. S., Barnes, S., & Cole, J. D. (1991). Validation of the five-minute speech sample in measuring expressed emotion. *Canadian Journal of Psychiatry, 36*(4), 297–299.
- Maysseless, O., Bartholomew, K., Henderson, A., & Trinke, S. (2004). "I was more her mom than she was mine:" role reversal in a community sample. *Family Relations, 53*(1), 78–86.
- McConaughy, S. H., & Achenbach, T. M. (2004). *Manual for the test observation form for ages 2–18*. Burlington, VT: University of Vermont, Center for Children, Youth, & Families.
- McGee, R. A., Wolfe, D. A., Yuen, S. A., Wilson, S. K., & Carnochan, J. (1995). The measurement of maltreatment: A comparison of approaches. *Child Abuse & Neglect, 19*(2), 233–249.
- Melnick, B., & Hurley, J. R. (1969). Distinctive personality attributes of child-abusing mothers. *Journal of Consulting and Clinical Psychology, 33*(6), 746.
- Minuchin, S. (1974). *Families and family therapy*. Cambridge, MA: Harvard University Press.
- Mitchell, M. A., & Maxwell, S. E. (2013). A comparison of the cross-sectional and sequential designs when assessing longitudinal mediation. *Multivariate Behavioral Research, 48*(3), 301–339.
- Morris, M. G., & Gould, R. W. (1963). Role reversal: A concept in dealing with the neglected/battered child syndrome. *American Journal of Orthopsychiatry, 33*(2), 298–299.
- Nuttall, A. K., & Valentino, K. (2017). An ecological-transactional model of generational boundary dissolution across development. *Marriage & Family Review, 53*(2), 105–150.
- Page, T., & Bretherton, I. (2001). Mother- and father-child attachment themes in the story completions of pre-schoolers from post-divorce families: Do they predict relationships with peers and teachers? *Attachment & Human Development, 3*(1), 1–29.
- Peris, T. S., & Emery, R. E. (2005). Redefining the parent-child relationship following divorce: Examining the risk for boundary dissolution. *Journal of Emotional Abuse, 5*(4), 169–189.
- Putnick, D. L., Bornstein, M. H., Lansford, J. E., Malone, P. S., Pastorelli, C., Skinner, A. T., ... Alampay, L. P. (2015). Perceived mother and father acceptance-rejection predict four unique aspects of child adjustment across nine countries. *Journal of Child Psychology and Psychiatry, 56*(8), 923–932.
- Radke-Yarrow, M., Zahn-Waxler, C., Richardson, D. T., Susman, A., & Martinez, P. (1994). Caring behavior in children of clinically depressed and well mothers. *Child Development, 65*(5), 1405–1414.
- Rogosch, F. A., Cicchetti, D., & Toth, S. L. (2004). Expressed emotion in multiple subsystems of the families of toddlers with depressed mothers. *Development and Psychopathology, 16*(3), 689–709.
- Rohner, R. P. (1990). *Handbook for the study of parental acceptance and rejection* (3rd ed.). Storrs, CT: Rohner Research Publications.
- Rohner, R. P., Khaleque, A., & Cournoyer, D. E. (2005). Parental acceptance-rejection: Theory, methods, cross-cultural evidence, and implications. *Ethos, 33*(3), 299–334.
- Rudd, K. L., Doan, S. N., & Yates, T. M. (2019). The physical health costs of positive adaptation to childhood adversity. *Journal of Health Psychology, 135*9105319873961.
- Ryan, R. M., Deci, E. L., & Grolnick, W. S. (1995). Autonomy, relatedness, and the self: Their relation to development and psychopathology. In D. Cicchetti, & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and methods* (pp. 618–655). New York, NY: Wiley.
- Sanchez, B., Esparza, P., Colón, Y., & Davis, K. E. (2010). Tryin' to make it during the transition from high school: The role of family obligation attitudes and economic context for Latino-emerging adults. *Journal of Adolescent Research, 25*(6), 858–884.
- Scharf, M., & Maysseless, O. (2011). Disorganizing experiences in second and third generation holocaust survivors. *Qualitative Health Research, 21*(11), 1539–1553.
- Selya, A. S., Rose, J. S., Dierker, L. C., Hedeker, D., & Mermelstein, R. J. (2012). A practical guide to calculating Cohen's f^2 , a measure of local effect size, from PROC MIXED. *Frontiers in Psychology, 3*, 1–6.
- Shaffer, D., Fisher, P., Lucas, C. P., Dulcan, M. K., & Schwab-Stone, M. E. (2000). NIMH diagnostic interview schedule for children version IV (NIMH DISC-IV): Description, differences from previous versions, and reliability of some common diagnoses. *Journal of the American Academy of Child & Adolescent Psychiatry, 39*(1), 28–38.
- Shaffer, A., & Sroufe, L. A. (2005). The developmental and adaptational implications of generational boundary dissolution: Findings from a prospective, longitudinal study. *Journal of Emotional Abuse, 5*(2–3), 67–84.
- Sher-Censor, E. (2015). Five minute speech sample in developmental research: A review. *Developmental Review, 36*, 127–155.
- Sher-Censor, E., & Yates, T. M. (2012). *Five minute speech sample narrative coherence coding manual*. Riverside, CA: University of California.
- Sroufe, L. A. (1989). Relationships and relationship disturbances. In A. Sameroff, & R. Emde (Eds.), *Relationship disturbances in early childhood: A developmental approach* (pp. 97–124). New York, NY: Basic Books.
- Sroufe, L. A., Bennett, C., Englund, M., Urban, J., & Shulman, S. (1993). The significance of gender boundaries in preadolescence: Contemporary correlates and antecedents of boundary violation and maintenance. *Child Development, 64*(2), 455–466.
- Sroufe, L. A., Egeland, B., & Carlson, E. (1999). One social world: The integrated development of parent-child and peer relationships. In W. A. Collins, & B. Laursen (Eds.), *Vol. 30. The Minnesota Symposia on child psychology: Relationships as developmental contexts* (pp. 241–262). Hillsdale, NJ: Erlbaum.
- Sroufe, L. A., Jacobvitz, D., Mangelsdorf, S., DeAngelo, E., & Ward, M. J. (1985). Generational boundary dissolution between mothers and their preschool children: A relationship systems approach. *Child Development, 56*(2), 317–325.
- Sroufe, L. A., & Ward, M. J. (1980). Seductive behavior of mothers of toddlers: Occurrence, correlates, and family origins. *Child Development, 51*(4), 1222–1229.
- Tompkins, T. L. (2007). Parentification and maternal HIV infection: Beneficial role or pathological burden. *Journal of Child and Family Studies, 16*(1), 108–118.
- Van Ijzendoorn, M. H., Schuengel, C., & Bakermans-Kranenburg, M. J. (1999). Disorganized attachment in early childhood: Meta-analysis of precursors, concomitants, and sequelae. *Development and Psychopathology, 11*(2), 225–250.
- 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*(2), 117–131.