Parent-Child Role-Confusion: A Critical Review of an Emerging Concept In press, *Developmental Review*

Jenny Macfie^{a,*}, Laura E. Brumariu^b, and Karlen Lyons-Ruth^c

^a Psychology Department, University of Tennessee, Knoxville, TN 37966, United States

^bDerner Institute, Adelphi University, Garden City, NY 11530, United States

^cDepartment of Psychiatry, Harvard Medical School, Boston, MA 02215, United States

*Corresponding author. Address: Department of Psychology, 301E Austin Peay, University of Tennessee, Knoxville, TN 37996-0900.

Email addresses: macfie@utk.edu (J. Macfie), lbrumariu@adelphi.edu (L. E. Brumariu), klruth@hms.harvard.edu (K. Lyons-Ruth).

Abstract

We propose that role-confusion or role reversal between parent and child is a major risk factor for a child's development, yet one that has gone largely unnoticed. In the context of an evolutionary tension between parental reproductive needs and child needs for nurturing, parental history and current stressors may affect the ability to invest in parenting a particular child. When adult relationships do not provide adequate emotional and instrumental support to the parent, he or she may look to a child to provide that support. A growing empirical literature across clinical, family systems and developmental disciplines has pointed to the potential for the child to take on the role of parent, spouse, or peer in relation to the parent, such that traditional parent-child roles become confused or reversed and generational boundaries blurred. From a developmental psychopathology perspective, this change in parent-child role relations may adversely affect the child's socio-emotional development if demands placed on the child exceed the capacity to comply and increase the risk for psychopathology. Conversely, shouldering family responsibilities that are within the developmental capacities of the child may lead to increased self-efficacy and competence. This paper critically reviews the growing literature, proposes a model for precursors to, and sequelae of, role-confusion, examines resilience, points to directions for future research, and informs preventive interventions.

Key Words: role-confusion, role reversal, boundary dissolution, child development, developmental psychopathology

Parent-Child Role-Confusion: A Critical Review of an Emerging Concept

The parent-child relationship is considered to be extremely important for healthy child development regardless of theoretical orientation (Cox & Harter, 2003; Laird, Pettit, Dodge, & Bates, 2003; Malone, Westen, & Levendosky, 2011; Patterson & Fisher, 2002; Sroufe, 2002; Toth, Rogosch, Manly, & Cicchetti, 2006). How parents (or other primary caregivers) interact with a child influences social-emotional development in significant ways, and aberrations may have detrimental effects. One such aberration is role-confusion: when a parent looks to a child to meet the parent's needs. However, the study of child development has neglected role-confusion, in part because of the use of multiple terms (including role reversal, parentification, and boundary dissolution), which are scattered across multiple literatures (developmental, clinical, and family systems).

The parent-child relationship evolved to protect the child long enough to carry the parent's genes to a new generation. However, as evolutionary anthropologists such as Hrdy (2009) have pointed out, a parent's need to reproduce does not map exactly onto a particular child's need for nurturing care, and may in fact be in conflict. Preoccupied by his or her own needs, including from an evolutionary viewpoint the need to survive, bear children, and bring the largest possible number of children to reproductive age, a parent may be unable adequately to meet a child's needs. The parent may instead contribute to a family system in which the child tries to take over some of the psychological and social functions usually performed as part of the parental role.

There is evidence that role-confusion appears in the first few years of life, is detrimental to success at developmental issues from infancy to adulthood, and carries from one generation to the next. However, this inversion in the roles of child and parent often escapes notice not only

because of the sparse and scattered literature, but also because descriptively, the child who has taken over parental functions may appear precociously mature, and the relationship between parent and child especially strong. For example, a young child may be particularly helpful and empathic towards a distressed parent, a parent may seem exceptionally affectionate when asking a child for kisses, or a parent may seem to be especially playful as a child's best friend. These factors obscure a cumulative understanding of the effects of role-confusion on child development.

The goal of this review is to bring the significance of this deviation in the parent-child relationship to the attention of developmental researchers and clinicians. We unite the literature under the term "role-confusion." We integrate theory, review empirical literature, and propose a developmental model for precursors to, and sequelae of, role-confusion. We consider when role-confusion is associated with developmental burden and deviation, and when it is associated with developmental progress and success. We review key (not all) studies, provide evidence for stability and intergenerational transmission, examine resilience, and suggest directions for future research. Because attachment theory underlies much of the developmental work on role-confusion, we draw most heavily from that literature while also integrating research from other traditions. We ask four important questions: Which contexts are associated with role-confusion? What are the effects of role-confusion on development? Is there stability over time and intergenerational transmission of role-confusion? Is there evidence that role-confusion may sometimes have a positive effect?

Terminology and Measurement

We first discuss the terminology used to describe role-confusion and provide a table of commonly used measures. Terms include parentification, role reversal, boundary dissolution,

parent as child, parent as peer, and parent as spouse. What they have in common is that child and parent roles shift such that either the child performs psychological and instrumental functions usually carried out by the parent for the child, or functions usually performed by another adult for the parent. We review the evolution of the construct and terminology in the past 50 years and conclude that, for our purposes, "role-confusion" provides the best umbrella term.

Although Freud did not focus on variations in the mother-child relationship, later object relations theorists brought its vicissitudes to the foreground of psychoanalytic thinking (Greenberg & Mitchell, 1983). In the 1960s, Winnicott introduced "false self" to describe a child's attempts to hide his or her true feelings and conform to the parent's needs and expectations (Winnicott, 1962). Also in the 1960s, "role reversal" was first used to describe physically abusive parents who saw their children as critical and powerful parent figures rather than as small children dependent on their care (Morris & Gould, 1963). In the 1970s, family therapists first used blurring of "intergenerational boundaries" and "triangulation" to characterize inappropriate role relations between parents and children (Minuchin, 1974). "Parentification" was also introduced to describe a child's taking a parental role towards a parent (Boszormenyi-Nagy & Spark, 1973; Chase, 1999; Flanzraich & Dunsavage, 1977; Jurkovic, 1998).

In the 1980s, additional subtypes appeared beyond child as parent, and the focus on boundaries evolved. The concept of "seductive care" (also called "non-responsive intimacy" or "spousification"), described flirtatious or overly physically intimate parental behavior towards a child that would be more appropriate between parent and romantic partner. A "peer-like relationship" described a parent who is, for example, over-stimulating, fails to set appropriate limits, and plays and squabbles with the child as an equal (Sroufe, Jacobvitz, Mangelsdorf, DeAngelo, & Ward, 1985). Sroufe et al. (1985) referred to all three distortions in the parent-child

relationship as forms of "boundary dissolution" in the family system (Sroufe et al., 1985).

Importantly, for the first time, the same construct included child as parent, child as spouse, and child as peer.

Also in the 1980s, Bowlby and early attachment researchers (Bowlby, 1988; Cassidy & Marvin, 1992; Main, Kaplan, & Cassidy, 1985) used "role reversal" to describe children who attempt to take charge of the relationship with a parent by behaving as parents themselves in one of two ways: controlling caregiving (empathic, structuring, helpful) or controlling-punitive (bossy, critical, domineering). In the 1990s, "role reversal" was also used to describe a caregiving role in adults' accounts of their childhood attachment relationships (Main & Goldwyn, 1991; Main, Goldwyn, & Hesse, 2002). "Role reversal" had now evolved to describe behavioral distortions rather than the cognitive distortions first proposed by Morris and Gould (1963).

In the 2000s, Kerig (2005) extended "boundary dissolution" to include parental intrusiveness, over-involvement, overprotectiveness, and psychological control. The rationale was that boundary dissolution reflects a parent's failure to recognize the psychological separateness of the child (Kerig, 2005). The term "role reversal," too, expanded so that it included situations in which a child or parent adopted the opposite role of the developmentally appropriate one, or the parent and child switched roles. It thus became equivalent to Sroufe's "boundary dissolution," including child as a parent (controlling-caregiving or controlling-punitive), child as spouse, and child as peer (Macfie, Houts, McElwain, & Cox, 2005; Macfie, McElwain, Houts, & Cox, 2005). In a separate development, "filial responsibility" appeared as the term for child as parent in immigrant families (Jurkovic et al., 2004). "Filial responsibility"

also reflects a shift of roles to child as parent but avoids the presumption of pathological outcomes (Ponizovsky, Kurman, & Roer-Strier, 2012).

All the above terms attempt to capture a shift in parent-child roles such that the child takes on functions usually performed by adults: managing and guiding the parent-child relationship, serving as a source of intimate physical contact, or serving as a friend to the parent. However, there are problems with each. "False self" only takes the child's perspective, "role reversal" seems to imply a complete reversal of roles, which is rarely the case, and both "parentification" and "filial responsibility" refer only to the child as parent. "Boundary dissolution" is a strong contender because it was the first term to recognize different subtypes as part of the same construct. However, the origins of this term are in object relations theories that posit an early merger in the infant's concepts of self and other, followed by a gradual differentiation during the early preschool years (Mahler, 1974). Thus, it expands the meaning of the construct beyond changes in roles to a parent not seeing a child as psychologically separate. While these parental internal representations are important to explore, there is not enough evidence at this point to know whether a parent's inability to see the child as psychologically separate accompanies changes in roles.

"Role-confusion" describes dyads in which neither parent nor child takes on his or her normal role (Vulliez-Coady, Obsuth, Torreiro-Casal, Ellertsdottir, & Lyons-Ruth, 2013). It refers to an objective observer's viewpoint rather than a subjective sense of feeling confused. "Role-confusion" has been observed in mothers in relation to their infants (Bronfman, Parsons, & Lyons-Ruth, 1992-2004) as well as in adolescents in relation to their mothers (Lyons-Ruth, Hennighausen, & Holmes, 2005). The scope of the term "role-confusion" matches Sroufe et al.'s (1985) "boundary dissolution," and Macfie, McElwain et al.'s (2005) "role reversal." That is,

"role-confusion" includes child as parent (providing emotional or instrumental support), spouse, or peer. However, it comes without some of the problems noted above in relation to other terms. Because role-confusion not only affects a child's relationship with a parent, but also with both parents as part of a family system, triangulation (when problems in a dyadic relationship draw in a third person) is also included. For the remainder of this review, we will use the term "role-confusion."

A selection of widely used measures of role-confusion comprises Table 1. The name of the measure, authors, construct assessed, type of measure, age of participant, and informant, are listed under retrospective, parent, child, and dyadic, measures. A full discussion of measures and their psychometric properties is beyond the scope of this review. However, broadly speaking, observational measures that involve coding of filmed parent-child interactions provide a rich window on role-confusion and are able to capture the dyadic nature of the construct. However, coding is both costly and time consuming. The obverse is true for questionnaire data, which are easy to collect but depend on self-report, often retrospective. Coded interviews with the child or parent and filmed interactions where coding includes only child or parent behavior, fall somewhere in between.

Theoretical Background

Evolutionary theory. We propose that role-confusion develops from the evolutionary tension between parent and child. Organisms adapt in order to survive to pass their genes onto the next generation, and in mammals, the parent-child relationship evolved to accomplish this (Darwin, 1860). Moreover, Darwin's theories of natural and sexual selection apply not only to biological but also to psychological adaptation (Buss, 2009). However, there is an inevitable conflict between a parent's and child's perspective on how much a parent should invest in a

particular child, with the child wanting more than siblings receive (Trivers, 1974). Parents invest in a child based on perceived benefits versus costs, and children, even as infants, are thought to be expert connoisseurs and elicitors of parental care (Hrdy, 1999, 2009), which empirical studies confirm (Beebe, Alson, Jaffe, Feldstein, & Crown, 1988; Tronick & Cohn, 1989). A parent has his or her own needs beyond parenting a child (e.g. for care, comfort, companionship, and help in accomplishing daily tasks), and may not be able to resolve the tension between these needs and the costs of raising a child. One solution is for a parent to raise the child but look to the child to meet some of these needs. Given the child's dependence on parental care, the child is likely to comply to secure the best relationship possible under the circumstances. Role-confusion thus ensues.

Ecological theory. Adaptation is also influenced by context (Darwin, 1860). A stressful context may result in further pressures on the parent that lead to increased need for support from others and that the parent looks to the child to provide in a role-confusion. In an ecological systems model (Bronfenbrenner, 1979) the biological child (including the child's gender) lies at the center of contexts from proximal to distal that affect child development. Proximal contexts include the relationship between the parents and the child, the relationship between the parents, parental history, and parental illness. Distal contexts include cultural norms. Stresses in any of these contexts may contribute to role-confusion in the family system as a parent struggles to provide for his or her children, and the child struggles to get adequate nurturance and attention.

Attachment theory. Within this evolutionary framework, a close attachment relationship between parent and infant is theorized to provide physical and emotional security, to increase the likelihood of infant survival (Bowlby, 1969/1982). Empirical studies find individual differences in the quality of infant-parent attachment are the products of the quality of caregiving, with a

secure attachment resulting from consistently sensitive and responsive care (Ainsworth, Blehar, Waters, & Wall, 1978; Sroufe, Egeland, Carlson, & Collins, 2005). Distortions in the attachment relationship may lead to role-confusion.

Disorganized attachment is one such distortion (Main & Hesse, 1990). Infants with disorganized attachment are thought to experience a paradoxical situation. They naturally look to their attachment figure for comfort and security, but the attachment figure is unable to provide either and may even be a source of fear. The parent may see the infant as more powerful and feel helpless to care for him or her (George & Solomon, 2008). These attributions of undue power to the infant may relate to the parent's own childhood experiences of overwhelming helplessness in relation to an abusive or hostile parent. Indeed, parents of disorganized infants display frightened, frightening, or other atypical behavior toward the infant (Madigan et al., 2006). They also have anomalous states of mind regarding their own attachment experiences, with unresolved experiences of loss or trauma and/or contradictory hostile and helpless representations of childhood attachment relationships (van IJzendoorn, Schuengel, & Bakermans-Kranenburg, 1999). Given these parental behaviors, the infant is thought to be in an insoluble conflict between approach and avoidance, and is therefore unable to use the caregiver as a source of comfort in times of distress. Thus, the attachment system, designed to buffer the infant from stress, breaks down so that the infant remains hypervigilant, fearful, unsoothed, and disorganized (Solomon & George, 2011). As the child develops, he or she may discover that by organizing, comforting, or attending to the parent, by accepting the parent's undue intimacy, or by serving as a confidante for the parent, he or she is able to gain more proximity and attention than would otherwise occur. Thereby, the child's sense of helplessness to influence the parent may decrease. Thus, one possible pathway to role-confusion may lie in the child's helplessness to access parental comfort

that is at the heart of disorganized attachment in infancy. However, not all children who are disorganized in infancy develop controlling, role confused behaviors, and not all role-confusion stems from disorganized attachment (NICHD Early Child Care Research Network, 2001).

Attachment theory also proposes that generalizations from the quality of caregiving result in mental representations (internal working models) that inform future relationships. Thus, a child who develops a role-confused relationship with the parent may develop representations of others as needing care and the self as underserving of care or of deserving care only through caring for others (Bowlby, 1980). Compulsive caregiving may therefore develop following childhood role-confusion (West & Sheldon-Keller, 1994). Moreover, internal working models of attachment relationships may be one process by which role-confusion carries from one generation to the next.

Family systems theory. In addition to attachment theory's focus on dyadic relationships, family systems theory's focus on the family as a whole also contributes to our understanding of role-confusion. Ideally, parents are supportive of each other and both parents are supportive of the child (Cox & Paley, 1997). Roles are thought to be characterized in terms of a vertical relationship between the parent and child subsystems, and horizontal relationships between the parents and between similarly aged siblings (Howes & Cicchetti, 1993). In this hierarchical system, parents nurture their children and assume leadership. There are clear generational boundaries between parent and child subsystems so that parental needs for instrumental and emotional support are met in the parental subsystem, while children's needs for structure and nurturing care are met primarily by the parental subsystem and to a lesser extent by the sibling subsystem. In certain contexts, however, shifts may occur such that parents are unable to fulfill their nurturing and structuring roles as parents and they either actively turn to their children, or

their children step in by default, to fulfill those functions (Hartup, 1986; Sroufe, 1989). Vertical relationships become more horizontal and roles become confused (Howes & Cicchetti, 1993). When the child takes on functions typically provided by adults, the child's developmental trajectory may take a different course, with both positive and negative possibilities.

The emotional security hypothesis proposes a process that may give rise to role-confusion in the family (Davies & Cummings, 1994). Whereas attachment theory addresses the child's need for security within dyadic relationships with individual attachment figures, the emotional security hypothesis addresses the need for security at the level of the family system. If, for example, there is ongoing and unresolved marital conflict between the parents, a child may struggle with high levels of emotional reactivity and arousal, may interpret the conflict as affecting his or her well-being, and may seek to increase felt security by either withdrawing or intervening to solve the conflict (Davies & Cummings, 1994). Intervening in parental conflict may lead to role-confusion.

Theory for resilience. The above theoretical framework implies a range in the types and degrees of role-confusion that are observed, especially in the extent to which the child is able to take on and perform the adult function that the parent is lacking. There will be a range of stressful contexts or parental incapacity that interferes with the parent's effective performance. We propose that if the functions that assigned (actively or passively) to the child do not exceed the child's capacity to cope, it may enhance a child's development. In particular, when the parent's difficulty lies in limited domains and does not impair the parent's ability to act as a source of comfort and authority within the family setting, the effect may enhance rather than distort child development. In specific cultural settings, for example in immigrant families where a child speaks the new language better than the parents, or in large families where siblings must

contribute to child care and household maintenance, such instrumental help in the context of loving and authoritative parents may increase a child's self-esteem and confidence. Thus, we propose that resilience lies in the parent's needs for the child's support not to exceed the child's ability to comply.

Clinical perspective. Finally, from a clinician's point of view, parent-child role-confusion may give rise to a variety of psychological processes in the child, processes that in turn may constitute mediating mechanisms for the negative impact of parental role-confusion on child developmental outcomes. First, the parent of a role-confused child withdraws from a parental regulatory role and fails to provide a sense of structure and protection for the child, leaving the child without a secure base for regulating arousal and finding comfort. Second, the ageinappropriate burden of responsibility for monitoring and engaging the parent is likely to induce feelings of helplessness, anger, and excessive guilt. In some cases, premature responsibility for siblings also gives rise to fear, helplessness, and guilt that the child is unable to provide adequate protection. Third, because the child prematurely enters into attempts to regulate the parent's emotions and behavior and suppress his or her own directions, the child is less able to allocate inner resources toward his or her own development. This may affect developmental achievements in a variety of areas including autonomy, mastery behavior, peer relations, and other domains detailed below. In addition, when the child suppresses his own agency, thoughts and experiences may remain mentally unintegrated, with a resulting propensity to disorganization in times of stress. Finally, the child may acquire distorted and unbalanced (role-confused) models of relationship that may be maladaptive outside the family system. These distorted models may include not only giving undue support to a particular parent, but also triangulation in the family system as a whole, with resulting disturbances in the relations to the other parent and to siblings.

Model of Role-Confusion

We now review empirical evidence for a proposed model for precursors to, and sequelae of, role-confusion. See Figure 1. We take a developmental psychopathology perspective (Cicchetti, 1984; Sroufe & Rutter, 1984) such that role-confusion versus resilience develops from failure versus success at successive developmental tasks. We start with contexts known to foster role-confusion, and proceed through child developmental periods from early infancy to adolescence and adulthood.

Context.

Which contexts are associated with role-confusion? We examine empirical evidence for role-confusion in contexts that have thus far been studied: child gender (at the center of Bronfenbrenner's ecological systems model of the effect of context on child development), marital conflict, child maltreatment, parent history of loss or trauma, and parental mental illness.

Child gender. Women are the primary caregivers in most societies and girls are encouraged to show behaviors consistent with this role. Boys on the other hand are encouraged to develop independence (Chodorow, 1978). However, evidence is unclear for gender differences in role-confusion and compulsive caregiving in adulthood.

With respect to gender differences in role-confusion, mothers were more likely to engage in seductive role-confusion with their sons than with their daughters when observed in the toddler (Sroufe & Ward, 1980) and preschool (Sroufe et al., 1985) periods in a low-SES at-risk sample. Moreover, being a girl was associated with self-reports of caring for mother, whereas being a boy was associated with being responsible for chores in middle childhood and adolescence in an urban poverty sample (McMahon & Luthar, 2007). However, no gender differences were found at age three in the large Study of Early Child Care and Youth

Development sample, using observational assessments of controlling-caregiving behavior in a normative sample (O'Connor, Bureau, McCartney, & Lyons-Ruth, 2011). Furthermore, no gender differences were found at age 20, also using observational measures (Brumariu, Obsuth, & Lyons-Ruth, 2013), or at age 20 using semi-structured interviews (Obsuth, Hennighausen, Brumariu, & Lyons-Ruth, 2014) in a low-income sample. To shed light on gender differences in role-confusion, it would be helpful to assess child gender differences with fathers in addition to mothers, and to assess all three subtypes of role-confusion.

In terms of gender differences in compulsive compliance, gender differences are also unclear. Female undergraduates (Valleau, Bergner, & Horton, 1995) reported that role-confusion with their parents as children (child as parent) was related to current compulsive caregiving (Wells, Glickauf-Hughes, & Jones, 1999), but the study did not include men. A second study of undergraduates, 65% female, also found an association between role-confusion with their parents as children and current compulsive caregiving, but found no difference between men and women (Wells et al., 1999). In a community sample, women did report more role-confusion (child as parent) as children than did men. Unexpectedly, however, role-confusion was associated with current compulsive caregiving for men, but not for women (Mayseless, Bartholomew, Henderson, & Trinke, 2004). Although role-confusion may be more common among women, it may have a more deleterious effect on men, perhaps because it is not role-congruent (Chodorow, 1978). Further studies including both men and women would help clarify the relationship between gender, role-confusion, and compulsive compliance.

Marital conflict. Marital conflict may foster role-confusion through triangulation: A parent may seek out a child for comfort and/or a child may intervene to try to solve the conflict In a prospective study, observed marital conflict at 12 months predicted observed parent-child

role-confusion (child as parent, spouse or peer) at 24 months in a normative sample (Macfie, Houts, Pressel, & Cox, 2008). Interestingly, each parent's conflictual behavior predicted the other parent's role-confusion. In a direct path, mother's conflictual behavior toward father led to father's role-confusion. In an indirect path, father's conflictual behavior towards mother led first to his withdrawal from her, and his withdrawal then led to mother's role-confusion. Thus, it seems as though it was a mother's conflictual behavior that most upset the father, but it was a father's withdrawal that most upset the mother, each leading to their seeking comfort from their child (Macfie, Houts, et al., 2008). In cross-sectional studies, too, lower marital satisfaction reported by mothers was associated with observations of the child's controlling role-confused behavior (child as parent) age 5-7 (Moss, Cyr, & Dubois-Comtois, 2004). Moreover, marital conflict reported by both parents was associated with child reports of role-confusion (child as parent) in middle childhood (O'Brien, Margolin, & John, 1995). However, contrary to these findings, mothers of controlling children (child as parent) aged 4-5 years reported positive relationships with partners (Belsky & Fearon, 2002)

All but one study found marital conflict to be associated with role-confusion, despite the use of heterogeneous measures. When parents are engaged in conflict, the likelihood is increased that one or both will rely on the child for emotional closeness and support. However, we need more research to understand how this role-confusion emerges and whether the parent, child, or both are involved in initiating the child's involvement.

Child maltreatment. Maltreating parents' deficits in their own care in childhood and ensuing vulnerability to environmental stressors are thought to increase their tendency to look to their children to take on parental functions (Howes & Cicchetti, 1993; Pianta, Egeland, & Erickson, 1989). In addition, a child may seek to support the parent and thereby try to avoid

further abuse (Cummings & Davies, 1994). Indeed, when a research assistant berated the mother for not completing forms correctly, physically abused preschool-aged boys offered assistance and comfort to their mothers more often than did nonmaltreated children (Cummings, Hennessy, Rabideau, & Cicchetti, 1994). Furthermore, at the level of representation, sexually and/or physically abused preschool-aged children were more likely than were nonmaltreated children to tell stories in which children demonstrated *less* empathy towards other children, and parents demonstrated *less* empathy towards children, but children demonstrated *more* empathy towards parents, in a role-confusion (Macfie et al., 1999). In the early school years, too, maltreated children (Dean, Malik, Richards, & Stringer, 1986). Empirical evidence thus supports early clinical observations that role-confusion (child as parent) is more likely in maltreating families (Morris & Gould, 1963). However, it is still unclear who initiates the role-confusion, and longitudinal studies are necessary to support a causal hypothesis.

Parental history of trauma or loss. Theoretically, childhood trauma or loss potentiates role-confusion as a parent who struggles to process their experience relies on his or her child for comfort. Indeed, mothers' self-reported history of sexual abuse moderated the relationship between marital conflict and role-confusion. Mothers with a sexual abuse history and lower marital satisfaction were more likely than were mothers with a sexual abuse history and higher marital satisfaction, to report role-confusion with their 5 to 8-year-old children in a normative sample (Fearon & Belsky, 2011). Moreover, adults' self-reports of a childhood history of parental divorce, neglect and rejection (women), and parental divorce only (men), were associated with current role-confusion in a low-SES community sample (Mayseless et al., 2004).

There is evidence that loss, too, is associated with role-confusion. Parents' reports of a childhood loss of a close family member were associated with current controlling-caregiving behavior in their children age 5 to 7 (Moss et al., 2004). Furthermore, lack of resolution of loss coded from the Adult Attachment Interview, AAI (George, Kaplan, & Main, 1984; Main et al., 2002) was associated with mothers' role-confusion in discussing their relationship with their adolescents. Mothers' role-confusion in turn was associated with their adolescents' controlling-caregiving behavior during a conflict discussion (Vulliez-Coady, Obsuth, Torreiro-Casal, Ellertsdottir, & Lyons-Ruth (2013). However, these studies all depended on retrospective reports of trauma and loss. Thus, current salience may be confused with etiological significance. Prospective longitudinal studies are necessary to confirm the effect of parent history on the development of role-confusion.

Parental mental illness. Parental mental illness may create a context for role-confusion, as the parent appears vulnerable and needing help. An emerging literature provides initial support for associations between role-confusion and parental alcoholism, depressive symptoms, and borderline personality disorder (BPD).

First, there is evidence for parental alcoholism. Adult females who retrospectively reported parental alcoholism scored higher on a measure of childhood role-confusion than did normative comparisons (Goglia, Jurkovic, Burt, & Burge-Callaway, 1992; Kelley et al., 2007). Moreover, retrospectively reported parental alcoholism was associated with childhood role-confusion in a clinical sample of adults (Burnett, Jones, Bliwise, & Ross, 2006). Second, there is support for parental depressive symptoms. Maternal depressive symptoms were associated with children's controlling caregiving or controlling punitive behavior (child as parent) age 3 in NICHD Study of Early Child Care and Youth Development sample of 1364 families (O'Connor

et al., 2011). Third, BPD is also associated with role-confusion. Children age 4 to 7, whose mothers had BPD, were more likely (controlling for current maternal major depressive disorder) to tell stories involving role-confusion (child as parent) than were normative comparisons (Macfie & Swan, 2009). Although limited and in need of replication and extension to other disorders, the literature suggests that maternal mental illness may be associated with role-confusion. One drawback, however, is that all the studies were cross-sectional. Prospective longitudinal studies of parents with mental illness and their children would clarify these relationships.

We have reviewed evidence for the development of role-confusion in specific contexts. Although there are no consistent effects for the child's gender, stressful factors in the child's immediate context may make role-confusion more likely, including marital conflict, child maltreatment, parental loss or trauma, and parental mental illness.

Developmental stages.

We now examine empirical support for precursors to, and sequelae of, role-confusion from infancy to adulthood, all of which context may moderate (discussed above). In doing so, we follow the proposed model. See Figure 1.

Infancy. We suggest that the evolutionary tension between the needs of the parent versus the costs of raising a child set the stage for aberrations in parenting in infancy that make the development of role-confusion more likely. A parent may bring representations of childhood role-confusion with his or her own parents, together with current unmet needs for care, to the relationship with an infant. The parent may then feel helpless and withdraw in part from the parental role just as his or her parent did, and look to the infant to meet his or her needs. This in turn makes a disorganized attachment with an infant probable. Disorganized attachment then

provides one pathway to the development of role-confusion. Theoretically, the child's shift from disorganized attachment in infancy to role-confused behavior beginning in the toddler period is one means by which the child gains more control over the parent's attention and involvement in the face of parental helplessness, role-confusion, or withdrawal. We next provide evidence for these proposed pathways. Alternative pathways remain as yet unidentified.

First, there is a prospective link between mothers' representations of childhood role-confusion and the development of role-confusion in the toddler period. In a normative sample of 138 first-born children, mothers' representations of their childhood relationships were assessed with the AAI (George et al., 1984; Main et al., 2002) before their child was born (Macfie, Fitzpatrick, Rivas, & Cox, 2008). Mother-child role-confusion (child as parent, child as spouse, parent as peer) was coded from a videotaped puzzle-solving mother-child interaction task at 24 months. Mothers' representations of their childhood role-confusion with their mothers before the child's birth predicted mothers' role-confusion with their toddlers over two years later (Macfie, Fitzpatrick, et al., 2008)

Second, maternal role-confused behaviors in infancy predict disorganized attachment. Parental role-confusion can be coded in the parent-infant interaction before it can include a contribution from the child, as the parent elicits comfort and reassurance from the infant rather than attending to the infant's needs, e.g., "Did you miss me? Give Mommy a kiss....please....please" (Lyons-Ruth, Bronfman, & Atwood, 1999). These parental indicators of role-confusion predicted disorganization of the infant's attachment behaviors (Lyons-Ruth, Bronfman, & Parsons, 1999).

Third, disorganized attachment predicts role-confusion (for the first time including a contribution from the child), beginning at 24 months. In the prospective study noted above,

disorganized attachment independently of maternal representations predicted role-confusion at 24 months, assessed in observations of mother-child puzzle-solving interactions (Macfie, Fitzpatrick, et al., 2008). Furthermore, disorganized attachment in infancy predicted role-confusion (child controlling caregiving or punitive behavior towards the mother) at age 3 (O'Connor et al., 2011) and at age 6 (Main & Cassidy, 1988; Main et al., 1985; Wartner, Grossmann, Fremmer-Bombik, & Suess, 1994). However, although disorganized attachment in infancy is one possible precursor to role—confusion beginning in the toddler period, this does not imply that every instance of role-confusion stems from disorganized attachment (NICHD Early Child Care Research Network, 2001). It is simply the only pathway currently to have empirical support from longitudinal studies. There may be other pathways beginning in infancy, and others that begin later in childhood.

Fourth, there is also empirical support for helplessness and withdrawal from the parental role in infancy predicting role-confusion in middle childhood (Bureau, Easterbrooks, & Lyons-Ruth, 2009). On the one hand, maternal role-confused behaviors with infants correlate with negative and intrusive behaviors by the parent (Lyons-Ruth, Bronfman, & Parsons, 1999; Lyons-Ruth et al., 2013). On the other hand, maternal withdrawn behaviors with infants may reflect continuing feelings of helplessness. Indeed, this helpless parental stance is a stronger predictor than maternal role-confused behavior of the subgroup of disorganized infants who will become caregiving toward the parent in a role-confusion in middle childhood (Bureau et al., 2009).

Although the links proposed in Figure 1 have theoretical support, not all have empirical support. Operationalization of a parent's own need for care is necessary to explore associations with feeling helpless and withdrawing from a parental role. Moreover, support for direct paths

from parents' representations of childhood role-confusion to withdrawal from the parental role, and from parents' feelings of helplessness to disorganized attachment in infancy is also lacking.

24 months. The first time we can assess role-confusion in both parent and child is at 24 months. Although an infant is too young to actively care for the parent, role-confusion in the form of child as parent, child as spouse, and parent as the child's peer can be coded in filmed parent-child interactions at age 2 (Macfie, Fitzpatrick, et al., 2008; Macfie, Houts, et al., 2005; Macfie, Houts, et al., 2008; Macfie, McElwain, et al., 2005). In a parental role, the child may take charge of the puzzle-solving or storybook-reading session and tell the parent what to do in a punitive or caregiving controlling manner. In the spousal role, the child may receive seductive or flirtatious overtures from the parent. In the peer role, the parent may fail to provide necessary structure and support, and instead play with the child as an equal (Cox, 1997a).

Role-confusion at 24 months is concurrently associated with detrimental effects on a toddler's autonomy, a key developmental task of the toddler period (Sroufe & Rutter, 1984). For almost 10% of a low-income sample of 176 mothers and toddlers, mothers' seductive care towards boys was associated with less maternal support, warmth, and help, and served to distract the child from task completion (Sroufe & Ward, 1980). However, there needs to be replication of this single study. Mothers' and toddlers' role-confused behavior may interfere not only with the child's autonomy but also with dyadic regulation of their toddler's emotions and behavior that precedes the development of self-regulation in the preschool period (Sroufe et al., 2005). Self-regulation may therefore prove more challenging.

Preschool and school age. During the preschool and school age periods, deleterious sequelae of role-confusion are evident. Key domains of functioning in the preschool and school age periods include self-regulation, peer relationships, competence at school, and the

development of representations of self and other (internal working models) to serve as templates for future relationships.

Theory suggests that a child learns from the parent how to adequately regulate his or her emotions and behavior during the preschool period (Fivush, 2007; Thompson, 1994; Thompson & Meyer, 2007). However, if a parent is more preoccupied with his or her own needs than with the child's, the child may lack this opportunity. Externalizing symptoms (e.g., aggression, oppositionality) and/or internalizing symptoms (e.g., anxiety, depression) may develop instead.

There is evidence that role-confusion is associated with difficulty with self-regulation, including both internalizing and externalizing problems in the preschool and school age periods. In a longitudinal study of a normative sample of 57 families, each parent was videotaped separately telling the 24-month-old child a story using a book with no words. Interestingly, father-toddler, but not mother-toddler, role-confusion (child as parent, child as spouse, parent as peer), predicted teacher-rated externalizing problems in kindergarten (Macfie, Houts, et al., 2005). However, in another longitudinal study of children of divorce age 4 to 12, clinician-rated role-confusion with father was associated with concurrent internalizing symptoms, and role-confusion with both parents predicted internalizing symptoms 2 years later (Johnston, Gonzàlez, & Campbell, 1987). Moreover, in a longitudinal study of a normative sample, role-confusion (triangulation with both parents) at 24 months predicted internalizing symptoms at 7 years (Jacobvitz, Hazen, Curran, & Hitchens, 2004). It is therefore not clear which parent's role-confusion is mostly likely to be associated with internalizing versus externalizing symptoms.

There have also been studies of role-confusion and child internalizing and externalizing symptoms with mothers only. In a normative sample of children aged 3 to 5 and 5 to 7, controlling punitive children had higher teacher-rated externalizing symptoms, and controlling

caregiving children had higher teacher-rated internalizing symptoms, than did securely attached children (Moss et al., 2004). Additionally, in the NICHD Study of Early Child Care sample of 1364 families, at age 3, controlling punitive children were less compliant, more disruptive, and had more mother-rated internalizing and externalizing symptoms than did securely attached children. Furthermore, at 4 ½ the controlling punitive children also had more teacher-rated externalizing symptoms than did securely attached children (O'Connor et al., 2011). Thus, controlling caregiving behavior may be associated with predominately internalizing symptoms and controlling punitive behavior may be associated with predominantly externalizing symptoms. Ideally, we would compare role-confusion with fathers with role-confusion with mothers to see if there is a parental gender by type of role-confusion interaction.

A second important adaptive task in the preschool and school age periods is the development of peer relationships. If a parent prematurely draws a child into attempts to regulate the parent's emotions and behavior, the child may suppress his or her own needs and initiatives, and may lack permission, opportunities, and self-regulation skills to develop initiatives with peers. In a prospective longitudinal study of a normative sample, role-confusion in the toddler period with mothers predicted social problems for girls in kindergarten, and role-confusion with fathers predicted social problems in kindergarten for boys (Macfie, Houts, et al., 2005).

Moreover, in a prospective longitudinal study of a low-SES, mostly single-parent sample, role-confusion with mothers at 42 months predicted difficulty with peer relationships at 10 to 11.

These children violated middle childhood norms by playing with opposite sex peers and were more unpopular and less competent with peers as rated by camp counselors (Sroufe, Bennett, Englund, Urban, & Shulman, 1993). There is therefore some evidence from prospective

longitudinal studies that role-confusion is associated with difficulties with peers, but future research needs to uncover underlying processes.

Third, another key domain in the school age period is being able to function well academically by displaying competence and the ability to pay attention. In seminal work, Baldwin and colleagues (1982) assessed role-confusion in the form of an unbalanced relationship between a parent and school-aged child in a clinical sample. Baldwin et al. (1982) defined an unbalanced relationship as a parent-child interaction characterized by more bids to initiate interaction by one than by the other to sustain the relationship. Unbalanced relationships were associated with lower teacher-rated and peer-rated competence (Baldwin et al., 1982). However, a drawback of this study is that it did not differentiate dyads in which the parent dominated the initiation process from those in which the child did. Moreover, in a normative sample, controlling children at age 6 (both punitive and caregiving) demonstrated pervasive deficits in academic competence at age 8 despite no difference in IQ compared with the other children (Moss & St-Laurent, 2001).

In terms of difficulties with attention problems, observed role-confusion (triangulation with both parents) at 24 months predicted attention problems at age 7 (Jacobvitz et al., 2004), and observed role-confusion (child as parent, spouse or peer) at 24 months predicted teacher-rated attention problems in kindergarten (Macfie, Houts, et al., 2005) in normative samples. Moreover, in an at-risk low-SES sample of mostly single mothers, role-confusion at 42 months predicted hyperactivity at age 6 to 8 and at age 11 (Carlson, Jacobvitz, & Sroufe, 1995).

Exactly how role-confusion relates to academic functioning and attention problems is unknown, however. Further work should explore the possibility that the child is preoccupied with what is going on at home, or that role-confused children have not developed school-related

skills because they have had to be unduly vigilant to the needs of the parents rather than to developing their own directions.

Finally, children's representations (internal working models) of role-confusion may provide an indication of how they view parent-child relationships, and what templates they carry forward into new relationships. The stories of middle-SES preschool-aged children age 6 who were controlling of their parents (in either a punitive, or caregiving manner), were characterized by helplessness and catastrophe (Solomon, George, & De Jong, 1995). Moreover, both maltreated preschool-aged children (Macfie et al., 1999) and children whose mothers had BPD age 4 to 7 (Macfie & Swan, 2009) from low-SES samples, were more likely to tell stories depicting role-confusion than were normative comparisons. Furthermore, role-confusion in the drawings of children age 4 to 8 ½ from a normative sample was associated with more marital conflict and with the child's attempting to intervene (Leon & Rudy, 2005). A representational model of role-confusion developed from the experience of trying to care for a parent in stressful contexts may have implications for future relationships in adolescence and adulthood and for the intergenerational transmission of role-confusion.

Adolescence and adulthood. We find evidence for an association between role-confusion and problems with the stage-salient issues of adolescence: identity development and romantic relationships (Sroufe & Rutter, 1984), and the development of psychopathology.

In terms of identity development, a prospective study of girls' transition to the Israeli army found that self-reported role-confusion (child as parent) was associated a year later with separation anxiety, enmeshment with peers, nurturance-seeking, and a lack of psychological independence from parents (Mayseless & Scharf, 2009). Moreover, self-reports of childhood role-confusion (child as parent) were associated with students (mostly female) feeling like

imposters with respect to professional achievements (Castro, Jones, & Mirsalimi, 2004). However, there has been no study of males in this regard. Moreover, underlying processes that might mediate the link between role-confusion and identity issues are unknown. One possibility is that role-confused parents rely unduly on the adolescent so that moving away evokes excessive guilt in the adolescent, which undermines efforts at autonomy. Another possibility is that an adolescent has deficits in competence and confidence due to a long-term lack of support from parents coupled with the need to pay undue attention to supporting the parent's at the expense of his or her own needs.

In the domain of romantic relationships, role-confusion with mothers (child as parent), coded during a conflict discussion task in a low-income sample of adults at 20, was associated with poorer overall quality of romantic relationships and with increased physical and emotional abuse of the young adults' romantic partners (Obsuth et al., 2014). We speculate that a role-confused relationship with the parent creates unbalanced representations (internal working models) of relationships, in which the adolescent exerts control and the parent seeks guidance and support. When these representations carry into new romantic relationships in adolescence, abuse of partners may ensue.

In our review of studies of role-confusion and psychopathology below, the subtype assessed is child as parent unless otherwise noted. Three studies (prospective, cross-sectional, and retrospective) found a relation between role-confusion and general psychopathology. Role-confusion at age 13 predicted psychiatric symptoms at age 17 ½, in a low-income sample (Shaffer & Egeland, 2011); role-confusion with the parent at 20 was associated concurrently with psychiatric symptoms (Obsuth et al., 2014); and retrospective reports of childhood role-

confusion were related to psychiatric symptoms, mediated by the perceived fairness or unfairness of the support given by the child to the parents (Jankowski, Hooper, Sandage, & Hannah, 2013).

In terms of specific symptoms of psychopathology, observed role-confusion in parentoffspring interaction at 20 was associated with concurrent depressive and dissociative symptoms (Obsuth et al., 2014). Similarly, retrospective reports of childhood role-confusion (in which parents sought intimacy and affection from their daughters rather than from their spouses) among girls age 12 to 22, were correlated with current self-reported depression and anxiety (Jacobvitz & Bush, 1996). However, Lyons-Ruth and colleagues did not find a relation between roleconfusion and major depressive disorder (Lyons-Ruth, Brumariu, Bureau, Hennighausen, & Holmes, in press). In relation to anxiety disorders, adults with generalized anxiety disorder reported more childhood role-confusion than did non-anxious comparisons (Cassidy, Lichtenstein-Phelps, Sibrava, Thomas, & Borkovec, 2009). However, Brumariu and colleagues did not find that adolescents diagnosed with an anxiety disorder differed in their levels of roleconfused behavior compared to adolescents with no diagnosis (Brumariu et al., 2013), nor were differences in role-confusion found in adults with and without anxiety disorders (Bernier & Meins, 2008). Thus, role-confusion may correlate with elevated anxious and depressive symptoms, but its relation to diagnosed depressive and anxiety disorders is less clear.

BPD has been conceptualized as a disorder of attachment, self development (including problems with identity), and self-regulation (Macfie, 2009), all of which are associated with role-confusion in childhood and adolescence as reviewed above. Moreover, in a prospective longitudinal study of a high-risk sample, role-confusion at 42 months correlated with the number of BPD symptoms at age 28 (Carlson, Egeland, & Sroufe, 2009). In addition, young adults who were role-confused toward their mothers in a conflict discussion had elevated rates of borderline

features at age 20, as well as more than three times the rates of recurrent suicidality or self-injury found in non-caregiving youth (Lyons-Ruth, Bureau, Hennighausen, Holmes, & Brumariu, 2014). Finally, in retrospective reports, adults with BPD reported more role-confusion than did adults with other personality disorders (Zanarini et al., 1997), and than did adults with depression alone (Lyons-Ruth, Melnick, Patrick, & Hobson, 2007). Role-confusion may be an etiological factor in the development of BPD, but we need further prospective studies to predict to a diagnosis of BPD rather than to number of symptoms.

Eating disorders are also associated with role-confusion. Women with anorexia retrospectively reported more childhood role-confusion with mothers and fathers than did comparisons who did not have an eating disorder, and their mothers reported more caregiving and confidante role-confusion with their anorectic daughters (Rowa, Kerig, & Geller, 2001). Additionally, a meta-analysis (Hooper, DeCoster, White, & Voltz, 2011) found a small but significant effect of retrospective reports of childhood role-confusion on psychopathology in adulthood, and the effect on eating disorders was greater than on mood, anxiety, or alcohol use (Hooper et al., 2011). However, all the studies on eating disorders relied on retrospective reports of role-confusion. We need prospective studies.

Overall, there is some evidence that role-confusion may signal a risk for, or be associated with, psychopathology, including BPD. Moreover, because BPD symptoms include eating disorders and dissociation (American Psychiatric Association, 2013), and because depression and anxiety are highly co-morbid with BPD (Zanarini et al., 1998), further study of the etiological significance of role-confusion in the development of BPD is warranted.

There is now a substantial body of work suggesting that precursors to, first appearance of, and sequelae of role-confusion complicate every stage of development, including attachment,

self-development, self-regulation, peer relationships, academic functioning, and identity development, which culminates in the development of psychopathology. Importantly, some of the evidence comes from prospective longitudinal studies. It is clear that role-confusion may affect child development negatively but this is not widely recognized or addressed. There appears to be a cascading effect such that problems at one developmental stage potentiate problems at the next.

Stability and Intergenerational transmission

The stability and intergenerational transmission of role-confusion may provide further insights into how role-confusion influences child development. For example, role-confusion that it limited to a particular developmental period due to marital conflict, may not have the same impact on development as prolonged role-confusion beginning with overwhelming experiences of trauma in the parent's childhood.

There was continuity of role-confusion (boundary dissolution) between 24 months, 42 months, and age 13 in a prospective longitudinal study of a low-income, largely single parent sample (Shaffer & Sroufe, 2005). In addition, there was continuity of role-confusion (controlling child as parent) between the preschool period and age 6 in a normative middle-income sample (Moss, Cyr, Bureau, Tarabulsy, & Dubois-Comtois, 2005). Moreover, in prospective longitudinal work, mother's role-confusion observed in interactions with her infant predicted her own child's role-confusion in interaction with her at age 20 as coded from a parental interview about the parent's relationship with the adolescent (Vulliez-Coady et al., 2013). This is remarkable both for the length of time between observations and because different methodologies were employed at each time point. Thus, it is likely that role-confused patterns

may continue over substantial periods of development, and the degree of persistence may be an important moderator of later effects on development.

There is also support for the inter-generational transmission of role-confusion. In a study of at-risk families, mothers who were in a seductive role-confusion with their 24-month-old children all reported childhood histories of sexual abuse (Sroufe & Ward, 1980). Furthermore, in a prospective longitudinal study of a normative sample of 138 families, researchers assessed both parents' reports of childhood role-confusion with their mothers (demands to attend to their mothers' physical or psychological care) with the AAI before their child was born (Macfie, McElwain, et al., 2005). These prenatal interviews predicted both parents' role-confusion with their toddlers in a filmed parent-child interaction (child as parent, child as spouse, or parent as peer), where each parent separately solved puzzles with the child. In a direct pathway, mothers' reports of childhood role-confusion with their own mothers predicted mother-daughter role-confusion in the next generation. In an indirect pathway, fathers' reports of childhood role-confusion with their mothers predicted mother-son role-confusion. This suggests that fathers first married women who would later engage in role-confusion with their sons (Macfie, McElwain, et al., 2005).

Thus, data from several prospective longitudinal studies, as well as other literature, suggests that there is stability in parental role-confusion, and that there is transmission from one generation to the next. Both stability and inter-generational transmission support the theory that representations (internal working models) of attachment relationships (Bowlby, 1969/1982) carry role-confusion across the lifespan and across generations. Continuity within and across generations underscores the need for greater understanding of the contexts and correlates of role-confusion.

Resilience

We propose that role-confusion confusion has detrimental effects on development only when the demands it places exceed the child's ability to cope. It may have a positive effect when the demands are developmentally appropriate. Moreover, cultural expectations may play a part. There are notable exceptions to the findings reviewed above that indicate that role-confusion is harmful to children, and we review the evidence consistent with the notion that role-confusion does not necessarily derail the child's development.

Childhood role-confusion (child as parent) retrospectively assessed in a semi-structured interview was not associated with current distress in men or women in a community study of Israeli adults (Mayseless et al., 2004). Moreover, although more role-confusion (instrumental and emotional), was reported by immigrant German adolescents than by native-born adolescents, more instrumental role-confusion was associated with increased self-efficacy in both groups, However, more instrumental role-confusion together with less emotional role-confusion was associated with exhaustion in the immigrant group (Titzmann, 2012). On the other hand, instrumental role-confusion (self-reported responsibilities for doing household chores or caring for siblings) was not associated with self-reported psychological child distress, while emotional caring for mother was, in an urban poverty sample of children age 8 to 17 (McMahon & Luthar, 2007). These studies suggest that the distinction between instrumental and emotional role-confusion is an important one, and that providing higher levels of support to parents may not be detrimental when the level of support is developmentally appropriate.

A particularly interesting set of findings comes from the resilient outcomes for children of parents with acquired immune deficiency syndrome (AIDS). Role-confusion (child as parent and child as spouse) was concurrently associated with parental AIDS in adolescents age 11 to 18,

and although it predicted externalizing problems 6 months later (Stein, Riedel, & Rotheram-Borus, 1999), it led to improved coping skills and less alcohol and tobacco use 6 years later (Stein, Rotheram-Borus, & Lester, 2007). In another study, role-confusion was also associated with parental AIDS, but, in contrast to the previous study, had a seemingly beneficial effect concurrently, with low externalizing symptoms in children/adolescents age 9 to 16 (Tompkins, 2007). However, no longitudinal follow-up was available. Thus, by middle childhood and adolescence, children may be able to care for a sick parent without a long-term derailment of their own development, and, in fact, role-confusion may actually improve their coping skills. This again supports the possibility that where role-confusion does not exceed a child's ability to cope, it may be beneficial rather than harmful.

Perceived satisfaction and fairness may moderate the relationship between role-confusion and resilience. In a 14-day diary study of 752 adolescents from Latin American, Asian, and European backgrounds, average age of almost 15, helping their families with practical tasks was associated with increased happiness in the teens, which the authors attributed to a feeling of role fulfillment (Telzer & Fuligni, 2009). In a second 14-day diary study of 64 of the adolescents, now average age 17 ¾ years, those from Latin American and Chinese backgrounds reported spending more time helping their families with practical tasks than did adolescents from European backgrounds (Fuligni et al., 2009). Although higher levels of markers of inflammation (related to the development of cardiovascular disease) were found overall in teens who helped their families, lower levels were found in teens who reported greater satisfaction in doing so (Fuligni et al., 2009). In a second study, perceived fairness moderated the relationship between role-confusion and adolescent competence (ability to show self-restraint), in that role-confusion was associated with competence only when perceived to be fair (Kuperminc, Jurkovic, & Casey,

2009). Both perceived satisfaction and fairness may be useful proxies for whether or not roleconfusion is developmentally appropriate.

In an immigrant family, the child may be the only English speaker and may handle the family's dealings with the larger world. In a family in which a parent has AIDS, the child may be the only available caregiver. Some children (perhaps younger) may become worried, overwhelmed, and guilt-ridden over this responsibility and their development disrupted. Other children (perhaps older) may actually gain in maturity and self-esteem. Notions of perceived satisfaction and fairness may help distinguish between them, as may consideration of instrumental versus emotional role-confusion. Trying to help a parent feel better, for example, is open-ended and perhaps feels never-ending and hopeless in a way that completing specific chores does not, although too many chores may lead to exhaustion. Moreover, in collectivist cultures, children helping parents may be more positively valued than in individualistic cultures.

Future Directions

Going forward it is important to understand the processes underlying the development of role-confusion. We do not know why some children and not others become involved in role-confusion. Specifically, more information on subtypes, contextual risk, child factors (e.g., temperament), putative mediators, and interventions will advance the literature substantially.

In terms of subtypes of role-confusion, our definition encompasses three related disturbances: child as parent, child as spouse, parent as peer. However, most studies either examined only one of them, or used an overall rating that includes all three. These approaches come at the expense of understanding the dynamics underlying each one, and how each may change over time. Moreover, within child as parent, more research on instrumental versus emotional care would be useful.

Contextual risk may be an important moderator of the effects of role-confusion. Because one pathway to role-confusion originates in disorganized attachment, cumulative contextual risk is relevant. Indeed, stresses associated with socioeconomic risk moderated links between attachment disorganization and later maladaptation (Belsky & Fearon, 2002; Bernier & Meins, 2008; Cyr, Euser, Bakermans-Kranenburg, & Van IJzendoorn, 2010). For example, Belsky and Fearon (2002) found that the effects of infant disorganization at 15 months on child outcomes at 36 months varied as a function of cumulative contextual risk. In addition, disorganization at 15 months predicted externalizing behavior from 1st to 6th grade, but only among boys at high socioeconomic risk (Fearon & Belsky, 2011). In lower risk environments, adequate buffers may be available in the family and community to compensate for role-confusion and prevent maladaptive behavior and psychopathology. In contrast, in high-risk environments a positive parent-child relationship may be more critical to helping the child regulate stress, so that parent-child role-confusion does not lead to emotional dysregulation and negative outcomes.

Child factors, including temperament, may also moderate the effects of role-confusion.

For example, we noted above that parental conflict was associated with increased role-confusion. In a study of the effect of parental conflict on cortisol reactivity, a child's bold aggressive temperament was associated with less cortisol reactivity and more severe externalizing symptoms, while an inhibited and hypervigilant temperament was associated with more cortisol reactivity and more severe internalizing symptoms (Davies, Sturge-Apple, & Cicchetti, 2011). These two temperamental types (bold, aggressive versus inhibited, hypervigilant) may also be differentially associated with the likelihood of parent-child role-confusion under conditions of marital conflict or other stressors. Children's IQ and personality are other possible moderators of role-confusion that have not received sufficient study (but see Obsuth et al., 2014).

The proposed model integrates current theory and research on precursors to, and sequelae of, role-confusion. Future work needs to identify mediating processes such as self-efficacy, perceived fairness, or excessive guilt. Moreover, few studies of role-confusion have assessed biological effects (but see Fuligni et al., 2009 for an exception). For example, increased stress reactivity in the hypothalamic-pituitary-adrenal (HPA) axis may result if the child feels overwhelmed by the responsibility of emotionally supporting the parent. Increased stress reactivity, in turn, may mediate impulsive self-damaging behaviors and suicidality associated with role-confusion and BPD in late adolescence. More research needs to explore the biological regulatory processes affected by role-confusion.

Randomized intervention studies can be a powerful tool for exploring mediating processes underlying role-confusion. Not only can interventions bring child development back onto an adaptive pathway, they can also test our theories of child development. A developmentally sensitive intervention may normalize the parent-child relationship (Cicchetti & Hinshaw, 2002; Cowan & Cowan, 2002). There are now promising non-randomized intervention data for parents and preschoolers that target controlling-punitive and controlling-caregiving behavior with the Circle of Security Program. The intervention combines education on attachment together with feedback to parents from watching videotapes of their interactions wih their child (Hoffman, Marvin, Cooper, & Powell, 2006). However, there have been no randomized controlled trials of interventions targeting parent-child role-confusion. Given the earlier reviewed findings that role-confusion can be reliably identified in parent-child interactions of 24-month-olds (Macfie, Fitzpatrick, et al., 2008; Macfie, Houts, et al., 2005; Macfie, Houts, et al., 2008; Macfie, McElwain, et al., 2005) and in the parent-child interactions

of three-year-olds (Moss et al., 2005; O'Connor et al., 2011), an important priority is to assess whether these early-onset patterns can be changed with developmentally sensitive interventions.

Conclusion

Parents, clinicians, and researchers need to understand parent-child role-confusion and its potentially deleterious effects on development. Children need to be the focus of their parents' care and protection, and parents need support from other adults and from their communities to manage stress and meet the needs of their children. Research across several traditions finds that role-confusion is associated with failure to negotiate successive developmental tasks culminating in the development of psychopathology. Research also informs conditions that foster resilience and increased competence. Responsibility for performing vital instrumental functions in the family when the child is old enough may foster adaptive coping skills. However, given the clear evidence that role-confusion can place an undue burden on a young child, it is crucial to design early interventions to help the parent rely on other sources of support to bring the child's development back on track.

In the 1940s and 1950s, a lack of understanding of the critical role of parent-infant attachment led to damaging psychological and physical effects of separation of the infant from a caregiver. For example, an infant in an orphanage ate from a propped- up bottle in a cot, or a toddler went to hospital alone. Yet the problem at that time was invisible to parents, hospital, and orphanage staff (Bowlby, 1951; Spitz & Wolf, 1946). The time has come for a similar awareness about role-confusion, also often invisible due to the child's seemingly precocious functioning, but also potentially associated with damaging effects.

References

- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Lawrence Erlbaum.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Baldwin, A. L., Cole, R. E., Baldwin, C. P., Fisher, L., Harder, D. W., & Kokes, R. F. (1982).

 The role of family interaction in mediating the effect of parental pathology upon the school functioning of the child. *Monographs of the Society for Research in Child Development*, 47(5), 72-80. doi: 10.2307/1166031
- Beebe, B., Alson, D., Jaffe, J., Feldstein, S., & Crown, C. (1988). Vocal congruence in mother—infant play. *Journal of Psycholinguistic Research*, 17(3), 245-259. doi: 10.1007/BF01686358
- Belsky, J., & Fearon, R. M. P. (2002). Infant-mother attachment security, contextual risk, and early development: A moderational analysis. *Development and Psychopathology*, *14*(2), 293-310. doi: 10.1017/S0954579402002067
- Bernier, A., & Meins, E. (2008). A threshold approach to understanding the origins of attachment disorganization. *Developmental Psychology*, 44(4), 969-982. doi: 10.1037/0012-1649.44.4.969
- Boszormenyi-Nagy, I., & Spark, G. M. (1973). *Invisible loyalties: Reciprocity in intergenerational family therapy*. Hagerstown, MD: Harper & Row.
- Bowlby, J. (1951). Maternal care and child health. Geneva: World Health Organization.
- Bowlby, J. (1969/1982). Attachment and loss. Vol. I. Attachment. New York: Basic Books.
- Bowlby, J. (1988). A secure base. New York: Basic Books.

- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Bronfman, E., Parsons, E., & Lyons-Ruth, K. (1992-2004). Atypical Maternal Behavior

 Instrument for Assessment and Classification (AMBIANCE): Manual for coding affective

 communication (2nd. ed.). Unpublished manual. Department of Psychiatry, Harvard

 Medical School, Cambridge, MA
- Brumariu, L. E., Obsuth, I., & Lyons-Ruth, K. (2013). Quality of attachment relationships and peer relationship dysfunction among late adolescents with and without anxiety disorders.

 Journal of Anxiety Disorders, 27(1), 116-124. doi: 10.1016/j.janxdis.2012.09.002
- Bureau, J.-F., Easterbrooks, M. A., & Lyons-Ruth, K. (2009). Attachment disorganization and controlling behavior in middle childhood: maternal and child precursors and correlates.

 Attachment and Human Development, 11(3), 265-284. doi: 10.1080/14616730902814788
- Burnett, G., Jones, R. A., Bliwise, N. G., & Ross, L. T. (2006). Family unpredictability, parental alcoholism, and the development of parentification. *American Journal of Family Therapy*, *34*(3), 181-189. doi: 10.1080/01926180600550437
- Buss, D. M. (2009). How can evolutionary psychology successfully explain personality and individual differences? *Perspectives on Psychological Science*, *4*(4), 359-366. doi: 10.1111/j.1745-6924.2009.01138.x
- Carlson, E. A., Egeland, B., & Sroufe, L. A. (2009). A prospective investigation of the development of borderline personality symptoms. *Development and Psychopathology*, 21(4), 1311-1334. doi: 10.1017/S0954579409990174

- Carlson, E. A., Jacobvitz, D., & Sroufe, L. A. (1995). A developmental investigation of inattentiveness and hyperactivity. *Child Development*, 66(1), 37-54. doi: 10.2307/1131189
- Cassidy, J., Lichtenstein-Phelps, J., Sibrava, N. J., Thomas, C. L., Jr., & Borkovec, T. D. (2009).

 Generalized anxiety disorder: Connections with self-reported attachment. *Behavior Therapy*, 40(1), 23-38. doi: 10.1016/j.beth.2007.12.004
- Cassidy, J., & Marvin, R. S. (1992). Attachment organization in three- and four-year-olds:

 Procedures and coding manual. Unpublished manual. University of Maryland.
- Castro, D. M., Jones, R. A., & Mirsalimi, H. (2004). Parentification and the impostor phenomenon: An empirical investigation. *American Journal of Family Therapy*, 32(3), 205-216. doi: 10.1080/01926180490425676
- Chase, N. D. (1999). Burdened children: Theory, research, and treatment of parentification.

 Thousand Oaks, CA: Sage Publications, Inc.
- Chodorow, N. (1978). *The reproduction of mothering: Psychoanalysis and the sociology of gender*. Berkeley, CA: University of California Press.
- Cicchetti, D. (1984). The emergence of developmental psychopathology. *Child Development*, 55(1), 1-7. doi: 10.2307/1129830
- Cicchetti, D., & Hinshaw, S. P. (2002). Prevention and intervention science: Contributions to developmental theory. *Development and Psychopathology*, *14*(4), 667-671. doi: 10.1017/S0954579402004017
- Cowan, P. A., & Cowan, C. P. (2002). Interventions as tests of family systems theories: Marital and family relationships in children's development and psychopathology. *Development and Psychopathology*, *14*(4), 731-759. doi: 10.1017/S0954579402004054

- Cox, M. J. (1997a). *Qualitative Ratings of Parent/Child Interaction at 24 Months of Age*.

 Unpublished manuscript. University of North Carolina at Chapel Hill.
- Cox, M. J., & Harter, K. S. M. (2003). Parent-child relationships. In M. H. Bornstein, L. Davidson, C. L. M. Keyes & K. A. Moore (Eds.), *Well-being: Positive development across the life course*. (pp. 191-204). Mahwah, NJ: Lawrence Erlbaum.
- Cox, M. J., & Paley, B. (1997). Families as systems. *Annual Review of Psychology, 48*, 243-267. doi: 10.1146/annurev.psych.48.1.243
- Cummings, E. M., Hennessy, K. D., Rabideau, G. J., & Cicchetti, D. (1994). Responses of physically abused boys to interadult anger involving their mothers. *Development and Psychopathology*, 6, 31-41.
- Cyr, C., Euser, E. M., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (2010).
 Attachment security and disorganization in maltreating and high-risk families: A series of meta-analyses. *Development and Psychopathology*, 22(1), 87-108. doi: 10.1017/S0954579409990289
- Darwin, C. (1860). On the origin of species by means of natural selection: Or the preservation of the favoured races in the struggle for life. London: John Murray.
- Davies, P. T., & Cummings, E. M. (1994). Marital conflict and child adjustment: An emotional security hypothesis. *Psychological Bulletin*, *116*(3), 387-411. doi: 10.1037/0033-2909.116.3.387
- Davies, P. T., Sturge-Apple, M. L., & Cicchetti, D. (2011). Interparental aggression and children's adrenocortical reactivity: Testing an evolutionary model of allostatic load.

 *Development and Psychopathology, 23(3), 801-814. doi: 10.1017/S0954579411000319

- Dean, A. L., Malik, M. M., Richards, W., & Stringer, S. A. (1986). Effects of parental maltreatment on children's conceptions of interpersonal relationships. *Developmental Psychology*, 22(5), 617-626. doi: 10.1037/0012-1649.22.5.617
- Fearon, R. M. P., & Belsky, J. (2011). Infant—mother attachment and the growth of externalizing problems across the primary-school years. *Journal of Child Psychology and Psychiatry*, 52(7), 782-791. doi: 10.1111/j.1469-7610.2010.02350.x
- Fivush, R. (2007). Maternal reminiscing style and children's developing understanding of self and emotion. *Clinical Social Work Journal*, *35*(1), 37-46. doi: 10.1007/s10615-006-0065-1
- Flanzraich, M., & Dunsavage, I. (1977). Role reversal in abused/neglected families: Implications for child welfare workers. *Children Today*, *6*, 13-36.
- Fuligni, A. J., Telzer, E. H., Bower, J., Irwin, M. R., Kiang, L., & Cole, S. W. (2009). Daily family assistance and inflammation among adolescents from Latin American and European backgrounds. *Brain, Behavior, and Immunity*, 23(6), 803-809. doi: 10.1016/j.bbi.2009.02.021
- George, C., Kaplan, N., & Main, M. (1984). *The Attachment Interview for Adults*. Unpublished manuscript. University of California at Berkeley.
- George, C., & Solomon, J. (2008). The caregiving system: A behavioral systems approach to parenting. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory,* research, and clinical applications (2nd ed.). (pp. 1020-1856). New York, NY: Guilford Press.

- Goglia, L. R., Jurkovic, G. J., Burt, A. M., & Burge-Callaway, K. G. (1992). Generational boundary distortions by adult children of alcoholics: Child-as-parent and child-as-mate.

 *American Journal of Family Therapy, 20(4), 291-299. doi: 10.1080/01926189208250899
- Greenberg, J., & Mitchell, S. (1983). *Object relations in psychoanalytic theory*. Cambridge, MA: Harvard University Press.
- Hartup, W. (1986). On relationships and development. In W. Hartup & Z. Rubin (Eds.), *Relationships and development* (pp. 1-26). Hillsdale, NJ: Erlbaum.
- Hoffman, K. T., Marvin, R. S., Cooper, G., & Powell, B. (2006). Changing toddlers' and preschoolers' attachment classifications: The circle of security intervention. *Journal of Consulting and Clinical Psychology*, 74(6), 1017-1026. doi: 10.1037/0022-006X.74.6.1017
- Hooper, L. M., DeCoster, J., White, N., & Voltz, M. L. (2011). Characterizing the magnitude of the relation between self-reported childhood parentification and adult psychopathology:
 A meta-analysis. *Journal of Clinical Psychology*, 67(10), 1028-1043. doi: 10.1002/jclp.20807
- Howes, P. W., & Cicchetti, D. (1993). A family/relational perspective on maltreating families:

 Parallel processes across systems and social policy implications. In D. Ciccherti & S. L.

 Toth (Eds.), *Child abuse, child development, and social policy* (pp. 249-300). Norwood,

 NJ: Ablex.
- Hrdy, S. B. (1999). *Mother nature: A history of mothers, infants, and natural selection*. New York: Pantheon.
- Hrdy, S. B. (2009). *Mothers and others: The evolutionary origins of mutual understanding*. Cambridge, MA: Harvard University Press.

- Jacobvitz, D., & Bush, N. F. (1996). Reconstructions of family relationships: Parent–child alliances, personal distress, and self-esteem. *Developmental Psychology*, *32*(4), 732-743. doi: 10.1037/0012-1649.32.4.732
- 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. doi: 10.1017/S0954579404004675
- 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. doi: 10.1111/j.1467-6427.2011.00574.x
- Johnston, J. R., Gonzàlez, R., & Campbell, L. E. (1987). Ongoing postdivorce conflict and child disturbance. *Journal of Abnormal Child Psychology*, 15(4), 493-509. doi: 10.1007/BF00917236
- Jurkovic, G. J. (1998). Destructive parentification in families: Causes and consequences. In L.L'Abate (Ed.), Family psychopathology: The relational roots of dyfunctional behavior.(pp. 237-255). New York, NY: Guilford Press.
- Jurkovic, G. J., Kuperminc, G., Perilla, J., Murphy, A., Ibañez, G., & Casey, S. (2004).
 Ecological and ethical perspectives on filial fesponsibility: Implications for primary prevention with immigrant Latino adolescents. *The Journal of Primary Prevention*, 25(1), 81-104. doi: 10.1023/B:JOPP.0000039940.99463.eb
- Kelley, M. L., French, A., Bountress, K., Keefe, H. A., Schroeder, V., Steer, K., . . . Gumienny, L. (2007). Parentification and family responsibility in the family of origin of adult

- children of alcoholics. *Addictive Behaviors*, *32*(4), 675-685. doi: 10.1016/j.addbeh.2006.06.010
- Kerig, P. K. (2005). Revisiting the construct of boundary dissolution: A multidimensional perspective. *Journal of Emotional Abuse*, *5*(2-3), 5-42. doi: 10.1300/J135v05n02_02
- Kuperminc, G. P., Jurkovic, G. J., & 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. doi: 10.1037/a0014064
- Laird, R. D., Pettit, G. S., Dodge, K. A., & Bates, J. E. (2003). Change in parents' monitoring knowledge: Links with parenting, relationship quality, adolescent beliefs, and antisocial behavior. *Social Development*, *12*(3), 401-419. doi: 10.1111/1467-9507.00240
- Leon, K., & Rudy, D. (2005). Family processes and children's representations of parentification. *Journal of Emotional Abuse*, 5(2-3), 111-142. doi: 10.1300/J135v05n02_06
- Lyons-Ruth, K., Bronfman, E., & Atwood, G. (1999). A relational diathesis model of hostile-helpless states of mind: Expressions in mother–infant interaction. In J. Solomon & C.George (Eds.), *Attachment disorganization* (pp. 33-69). New York, NY: Guilford Press.
- Lyons-Ruth, K., Bronfman, E., & Parsons, E. (1999). Maternal frightened, frightening, or atypical behavior and disorganized infant attachment patterns. *Monographs of the Society for Research in Child Development*, 64(3), 67-96. doi: 10.1111/1540-5834.00034
- Lyons-Ruth, K., Brumariu, L. E., Bureau, J. F., Hennighausen, K., & Holmes, J. (in press). Role-confusion and disorientation in young adult-parent interaction among individuals with borderline symptomotology. *Journal of Personality Disorders*.
- Lyons-Ruth, K., Bureau, J.-F., Easterbrooks, M. A., Obsuth, I., Hennighausen, K., & Vulliez-Coady, L. (2013). Parsing the construct of maternal insensitivity: Distinct longitudinal

- pathways associated with early maternal withdrawal. *Attachment & Human Development*, 15(5-6), 562-582. doi: 10.1080/14616734.2013.841051
- Lyons-Ruth, K., Hennighausen, K., & Holmes, B. (2005). *Goal-Corrected Partnership in Adolescence Coding System (GPACS): Coding manual, Version 2.* Unpublished manuscript. Department of Psychiatry, Harvard Medical School, Cambridge, MA.
- Lyons-Ruth, K., Melnick, S., Patrick, M., & Hobson, R. P. (2007). A controlled study of Hostile-Helpless states of mind among borderline and dysthymic women. *Attachment & Human Development*, 9(1), 1-16. doi: 10.1080/14616730601151417
- Macfie, J. (2009). Development in children and adolescents whose mothers have borderline personality disorder. *Child Development Perspectives*, *3*(1), 66-71. doi: 10.1111/j.1750-8606.2008.00079.x
- Macfie, J., Fitzpatrick, K. L., Rivas, E. M., & Cox, M. J. (2008). Independent influences upon mother-toddler role reversal: Infant-mother attachment disorganization and role reversal in mother's childhood. *Attachment & Human Development*, 10(1), 29-39. doi: 10.1080/14616730701868589
- 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. doi: 10.1111/J.1467-9507.2005.00314.X
- Macfie, J., Houts, R. M., Pressel, A. S., & Cox, M. J. (2008). Pathways from infant exposure to marital conflict to parent-toddler role reversal. *Infant Mental Health Journal*, 29(4), 297-319. doi: 10.1002/imhj.20181
- 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. doi: 10.1080/14616730500039663
- 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. doi: 10.1017/S0954579409000534
- Macfie, J., Toth, S. L., Rogosch, F. A., Robinson, J., Emde, R. N., & Cicchetti, D. (1999). Effect of maltreatment on preschoolers' narrative representations of responses to relieve distress and of role reversal. *Developmental Psychology*, *35*(2), 460-465. doi: 10.1037/0012-1649.35.2.460
- Madigan, S., Bakermans-Kranenburg, M. J., van IJzendoorn, M. H., Moran, G., Pederson, D. R., & Benoit, D. (2006). Unresolved states of mind, anomalous parental behavior, and disorganized attachment: A review and meta-analysis of a transmission gap. *Attachment & Human Development*, 8(2), 89-111. doi: 10.1080/14616730600774458
- Mahler, M. S. (1974). Symbiosis and individuation: The psychological birth of the human infant. The Psychoanalytic Study of the Child, 29, 89-106.
- Main, M., & Cassidy, J. (1988). Categories of response to reunion with the parent at age 6:

 Predictable from infant attachment classifications and stable over a 1-month period.

 Developmental Psychology, 24(3), 415-426. doi: 10.1037/0012-1649.24.3.415
- Main, M., & Goldwyn, R. (1991). Adult attachment rating and classification systems, Version4.1. Unpublished manuscript. Department of Psychology. University of California,Berkeley.

- Main, M., Goldwyn, R., & Hesse, E. (2002). *Adult attachment scoring and classification*systems, version 7.1. Unpublished manuscript. Department of Psychology. University of California, Berkeley.
- Main, M., & Hesse, E. (1990). Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In M. T. Greenberg, D. Cicchetti & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 161-182). Chicago: University of Chicago Press.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development*, 50(1-2), 66-104. doi: 10.2307/3333827
- Malone, J. C., Westen, D., & Levendosky, A. A. (2011). Personalities of adults with traumatic childhood separations. *Journal of Clinical Psychology*, 67(12), 1259-1282. doi: 10.1002/jclp.20844
- Mayseless, 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: An Interdisciplinary Journal of Applied Family Studies*, *53*(1), 78-86. doi: 10.1111/j.1741-3729.2004.00011.x
- Mayseless, O., & Scharf, M. (2009). Too close for comfort: Inadequate boundaries with parents and individuation in late adolescent girls. *American Journal of Orthopsychiatry*, 79(2), 191-202. doi: 10.1037/a0015623

- McMahon, T. J., & Luthar, S. S. (2007). Defining characteristics and potential consequences of caretaking burden among children living in urban poverty. *American Journal of Orthopsychiatry*, 77(2), 267-281. doi: 10.1037/0002-9432.77.2.267
- Minuchin, S. (1974). Families and family therapy. Cambridge, MA: Harvard University Press.
- Morris, M. G., & Gould, R. W. (1963). Role-reversal: A necessary concept in dealing with battered child syndrome. *American Journal of Orthopsychiatry*, *33*, 298-299.
- Moss, E., Cyr, C., Bureau, J.-F., Tarabulsy, G. M., & Dubois-Comtois, K. (2005). Stability of attachment during the preschool period. *Developmental Psychology*, 41(5), 773-783. doi: 10.1037/0012-1649.41.5.773
- Moss, E., Cyr, C., & Dubois-Comtois, K. (2004). Attachment at early school age and developmental risk: examining family contexts and behavior problems of controlling-caregiving, controlling-punitive, and behaviorally disorganized children. *Developmental Psychology*, 40(4), 519-532. doi: 10.1037/0012-1649.40.4.519
- Moss, E., & St-Laurent, D. (2001). Attachment at school age and academic performance. *Developmental Psychology*, 37(6), 863-874. doi: 10.1037/0012-1649.37.6.863
- NICHD Early Child Care Research Network. (2001). Child-care and family predictors of preschool attachment and stability from infancy. *Developmental Psychology*, *37*(6), 847-862. doi: 10.1037/0012-1649.37.6.847
- O'Brien, M., Margolin, G., & John, R. S. (1995). Relation among marital conflict, child coping, and child adjustment. *Journal of Clinical Child Psychology*, 24(3), 346-361. doi: 10.1207/s15374424jccp2403_12
- O'Connor, E., Bureau, J. F., McCartney, K., & Lyons-Ruth, K. (2011). Risks and outcomes associated with disorganized/controlling patterns of attachment at age three years in the

- National Institute of Child Health & Human Development study of early child care and youth development. *Infant Mental Health Journal*, *32*(4), 450-472. doi: 10.1002/imhj.20305
- Obsuth, I., Hennighausen, K., Brumariu, L. E., & Lyons-Ruth, K. (2014). Disorganized behavior in adolescent–parent interaction: Relations to attachment state of mind, partner abuse, and psychopathology. *Child Development*, 85(1), 370-387. doi: 10.1111/cdev.12113
- Patterson, G. R., & Fisher, P. A. (2002). Recent developments in our understanding of parenting: Bidirectional effects, causal models, and the search for parsimony. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 5: Practical issues in parenting (2nd ed.).* (pp. 59-88): Lawrence Erlbaum Associates Publishers, Mahwah, NJ.
- Pianta, R., Egeland, B., & Erickson, M. F. (1989). The antecedents of maltreatment: Results of the Mother-Child Interaction Research Project. In D. Ciccherti & V. Carlson (Eds.), *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect.* (pp. 203-253): Cambridge University Press, New York, NY.
- Ponizovsky, Y., Kurman, J., & Roer-Strier, D. (2012). When role reversal and brokering meet: Filial responsibility among young immigrants to Israel from the former Soviet Union.

 *Journal of Family Psychology, 26(6), 987-997. doi: 10.1037/a0029913
- Rowa, K., Kerig, P. K., & Geller, J. (2001). The family and anorexia nervosa: Examining parent–child boundary problems. *European Eating Disorders Review*, 9(2), 97-114. doi: 10.1002/erv.383
- Shaffer, A., & Egeland, B. (2011). Intergenerational transmission of familial boundary dissolution: Observations and psychosocial outcomes in adolescence. *Family Relations*:

- *An Interdisciplinary Journal of Applied Family Studies*, 60(3), 290-302. doi: 10.1111/j.1741-3729.2011.00653.x
- Shaffer, A., & Sroufe, L. A. (2005). The developmental and adaptational implications of generational boundary dissolution: Findings from a perspective, longitudinal study. *Journal of Emotional Abuse*, 5(2-3), 67-84. doi: 10.1300/J135v05n02_04
- Solomon, J., & George, C. (2011). The disorganized attachment-caregiving system:

 Dysregulation of adaptive processes at multiple levels. In J. Solomon & C. George (Eds.),

 Disorganized attachment and caregiving. (pp. 3-24). New York: Guilford Press.
- Solomon, J., George, C., & De Jong, A. (1995). Children classified as controlling at age six:

 Evidence of disorganized representational strategies and aggression at home and at school. *Development and Psychopathology*, 7(3), 447-463. doi:

 10.1017/S0954579400006623
- Spitz, R. A., & Wolf, K. M. (1946). Anaclitic depression; an inquiry into the genesis of psychiatric conditions in early childhood, II. *The Psychoanalytic Study of the Child*, 2, 313-342.
- Sroufe, L. A. (1989). Relationships and relationship disturbances. In A. J. Sameroff & R. N. Emde (Eds.), *Relationship disturbances in early childhood: A developmental approach* (pp. 97-125). New York: Basic Books.
- Sroufe, L. A. (2002). From infant attachment to promotion of adolescent autonomy: Prospective, longitudinal data on the role of parents in development. In J. G. Borkowski, S. L. Ramey & M. Bristol-Power (Eds.), *Parenting and the child's world: Influences on academic, intellectual, and social-emotional development.* (pp. 187-202). Mahwah, NJ: Lawrence Erlbaum Associates.

- 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. doi: 10.2307/1131262
- Sroufe, L. A., Egeland, B., Carlson, E. A., & Collins, W. A. (2005). The development of the person: The Minnesota study of risk and adaptation from birth to adulthood. New York, NY: Guilford Press.
- 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. doi: 10.2307/1129722
- Sroufe, L. A., & Rutter, M. (1984). The domain of developmental psychopathology. *Child Development*, 55(1), 17-29. doi: 10.2307/1129832
- Sroufe, L. A., & Ward, M. J. (1980). Seductive behavior of mothers of toddlers: Occurrence, correlates, and family origins. *Child Development*, *51*(4), 1222-1229. doi: 10.2307/1129564
- Stein, J. A., Riedel, M., & Rotheram-Borus, M. J. (1999). Parentification and its impact on adolescent children of parents with AIDS. *Family Process*, 38(2), 193-208. doi: 10.1111/j.1545-5300.1999.00193.x
- Stein, J. A., Rotheram-Borus, M. J., & Lester, P. (2007). Impact of parentification on long-term outcomes among children of parents with HIV/AIDS. *Family Process*, 46(3), 317-333. doi: 1111/j.1545-5300.2007.00214.x

- Telzer, E. H., & Fuligni, A. J. (2009). Daily family assistance and the psychological well-being of adolescents from Latin American, Asian, and European backgrounds. *Developmental Psychology*, 45(4), 1177-1189. doi: 10.1037/a0014728
- Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. *Monographs of the Society for Research in Child Development*, 59(2-3), 25-52. doi: 10.2307/1166137
- Thompson, R. A., & Meyer, S. (2007). Socialization of emotion regulation in the family. In J. J. Gross (Ed.), *Handbook of emotion regulation*. New York, NY: Guilford Press.
- Titzmann, P. F. (2012). Growing up too soon? Parentification among immigrant and native adolescents in Germany. *Journal of Youth and Adolescence*, 41(7), 880-893. doi: 10.1007/s10964-011-9711-1
- Tompkins, T. L. (2007). Parentification and maternal HIV infection: Beneficial role or pathological burden? *Journal of Child and Family Studies*, 16(1), 113-123. doi: 10.1007/s10826-006-9072-7
- Toth, S. L., Rogosch, F. A., Manly, J. T., & Cicchetti, D. (2006). The efficacy of toddler-parent psychotherapy to reorganize attachment in the young offspring of mothers with major depressive disorder: A randomized preventive trial. *Journal of Consulting and Clinical Psychology*, 74(6), 1006-1016. doi: 10.1037/0022-006X.74.6.1006
- Trivers, R. L. (1974). Parent-offspring conflict. *American Zoologist*, 14, 249-264. doi: doi:10.1093/icb/14.1.249
- Tronick, E. Z., & Cohn, J. F. (1989). Infant-mother face-to-face interaction: Age and gender differences in coordination and the occurrence of miscoordination. *Child Development*, 60(1), 85-92. doi: 10.2307/1131074

- Valleau, M. P., Bergner, R. M., & Horton, C. B. (1995). Parentification and caretaker syndrome:

 An empirical investigation. *Family Therapy*, 22, 157-164.
- 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), 225-249. doi: 10.1017/S0954579499002035
- 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. doi: 10.1007/s 10826-006-9072-7.
- Wartner, U. G., Grossmann, K., Fremmer-Bombik, E., & Suess, G. (1994). Attachment patterns at age six in south Germany: Predictability from infancy and implications for preschool behavior. *Child Development*, 65(4), 1014-1027. doi: 10.2307/1131301
- Wells, M., Glickauf-Hughes, C., & Jones, R. (1999). Codependency: A grass roots construct's relationship to shame-proneness, low self-esteem, and childhood parentification.

 American Journal of Family Therapy, 27(1), 63-71. doi: 10.1080/019261899262104
- West, M. L., & Sheldon-Keller, A. E. (1994). *Patterns of relating: An adult attachment perspective*. New York, NY: Guilford Press.
- Winnicott, D. W. (1962). Ego integration in child development. In D. W. Winnicott (Ed.), *The maturational processes and the facilitating environment* (pp. 56-63). London: Hogarth Press.
- Zanarini, M. C., Frankenburg, F. R., Dubo, E. D., Sickel, A. E., Trikha, A., Levin, A., & Reynolds, V. (1998). Axis I comorbidity of borderline personality disorder. *The American Journal of Psychiatry*, 155(12), 1733-1739.

Zanarini, M. C., Williams, A. A., Lewis, R. E., Reich, R. B., Vera, S. C., Marino, M. F., . . .

Frankenburg, F. R. (1997). Reported pathological childhood experiences associated with the development of borderline personality disorder. *The American Journal of Psychiatry*, *154*(8), 1101-1106.

Table 1

Adult Retrospective, Parent-focused, Child-focused, and Dyadic Measures of Role-confusion

Measure	Authors	Construct measured	Type	Age	Informant
A. Retrospective					_
1. Adult Attachment	George et al.,	Role reversal	Semi-	Adolescence,	Self,
Interview	1984; Main &		structured	adulthood	observer
	Goldwyn,		interview		
	1991; Main et				
2 Childhaad	al., 2002	Dala and facing Contract and	C:	10.	C -1C
2. Childhood Experiences	Bifulco, Brown, &	Role-confusion (instrumental and emotional)	Semi- structured	18+	Self, observer
of Care and Abuse	Harris, 1994	and emotionar)	interview		Observer
3. Perceptions of Adult	Lichtenstein &	Role reversal/ enmeshment	Questionnaire	Adulthood	Self
Attachment	Cassidy, 1991-		Questionium	11001011000	2011
Questionnaire	April				
4. Parentification Scale	Mika, Bergner,	Parentification	Questionnaire	Adulthood	Self
	& Baum, 1987				
5. The Parent-Child	Kerig, 2007;	Enmeshment, parentification,	Questionnaire	Adolescence	Self
Boundaries Scale-III	Kerig &	adultification, spousification-			
	Brown, 1996	hostile, spousification-			
		seductive, infantilization,			
		protection from boundary dissolution			
6. History of	Mayseless et	Role reversal	Semi-	19+	Self,
Attachments	al., 2004	Role le versui	structured	1)	observer
	, 200		interview		00001.01
7. The Parentification	Jurkovic &	Parentification	Questionnaire	Adulthood	Self
Questionnaire	Thirkield,	(expressive/emotional			
	1998; Session	caretaking and physical			
	& Jurkovic,	caretaking)			
	1986				

8. Comprehensive Filial Responsibility	Ponizovsky et al., 2012	Filial responsibility, brokering roles	Questionnaire	Adults	Self
Inventory					
B. Parent	Bronfman et				
1. Atypical Maternal	al., 1992-2004	Role-boundary confusion	Parent-child	Parents of	Observer
Behavior Instrument			interaction	infants	
For Assessment and					
Classification			a .	D	G 16
2. Experiences of	George &	Maternal helplessness	Semi-	Parents of	Self,
Caregiving Interview	Solomon, 1996		structured interview	children 6-20	observer
3. Parental Assessment	Vulliez-Coady	Role-confusion	Semi-	Parents	Self,
of Role-confusion	et al., 2013	Role-comusion	structured	Tarches	observer
(based on	ct u, 2015		interview		3881 (81
Experiences of					
Caregiving					
Interview)					
4. The Caregiving	George &	Caregiving helplessness	Questionnaire	Parents	Self
Helplessness	Solomon, 2008				
Questionnaire				_	
5. Adult-Adolescent	Bavolek, 1984;	Parentification: Reverses	Questionnaire	Parents	Self
Parenting Inventory Version 2	Bavolek &	appropriate family roles			
C. Child	Keene, 1999				
1. Narrative Emotion	Warren,	Narrative representations of	Story-stem	3 to 7	Self,
Coding	Mantz-	role reversal	completion	3 10 7	observer
Couning	Simmons, &		completion		00501 (01
	Emde, 1993				
2. Family Drawing Task	Fury, Carlson,	Role reversal	Drawings	4 to 8 ½	Self,
-	& Sroufe, 1997		-		observer
3. Attachment Classification	Cassidy &	Controlling punitive,	Parent-child	$2 \frac{1}{2}$ to $4 \frac{1}{2}$	Observer
System for Preschool- age	Marvin, 1992	controlling caregiving	interaction		

Children 4. Attachment Classification System	n Main & Cassidy, 1987, 1988	Controlling punitive, controlling caregiving	Parent-child interaction	6	Observer
5. Disorganization and Controlling Scales	Bureau et al., 2009	Hostile/punitive, caregiving	Parent-child interaction	7 to 9	Observer
6. Middle Childhood Attachment Strategies Coding System, Version 1	Brumariu, Kerns, Bureau, & Lyons-Ruth, 2013	Controlling caregiving, controlling punitive	Parent-child interaction	8 to 12	Observer
7. The Child Caretaking Scale	Baker & Tebes, 1994	Role reversal	Questionnaire	8 to 18	Self
8. Inadequate Boundaries Questionnaire	Mayseless & Scharf, 2000	Blurring of psychological boundaries, parentification	Questionnaire	Adolescent	Self
9. Filial Responsibility Scale-Youth	Leon & Rudy, 2005	Instrumental and emotional caregiving. Fairness	Questionnaire	11 to 18	Self
D. Dyadic					
1. Seductive Behavior ^a	Sroufe & Ward, 1980	Maternal seductive behavior, child distracted from tasks	Parent-child interaction	Toddlerhood	Observer
2. Dissolution of Generational Boundaries Scale ^b	Sroufe et al., 1985	Generational boundaries	Parent-child interaction	3 1/2	Observer
3. Qualitative Ratings of Parent/Child Interactions	Cox, 1997a, 1997b	Role reversal (child as parent, child as spouse, parent as child's peer)	Parent-child interaction	Toddlerhood, preschool	Observer
4. Boundary Dissolution ^c	Shaffer & Sroufe, 2005	Boundary dissolution	Family interaction	13	Observer
5. Goal-Corrected Partnership in	(Lyons-Ruth et al., 2005)	Punitive control, caregiving/role-confusion	Parent- adolescent	Adolescent	Observer

Adolescence interaction

Coding System

Note. a, b, overlap; interactions were also recoded from the individual perspective of the adolescent participant.

Figure 1. Proposed model of role-confusion

Contexts: Child's gender, marital conflict, child maltreatment, parental loss or trauma, parental mental illness

