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"HE KNOWS WHO HE'S MESSING WITH": HOSTILE/HELPLESS REPRESENTATIONS ON THE PARENT DEVELOPMENT INTERVIEW

Anna Kilbride

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ABSTRACT

Current systems for assessing parenting narratives lack the capacity to capture representational phenomena associated with significantly disrupted attachment relationships. This thesis will describe the adaptation of the valid and reliable Hostile/Helpless (HH) coding system for use with the Parent Development Interview (PDI). The hostile–helpless dyadic model posits that these two relational stances derive from an unbalanced internal working model of attachment that is shaped over the course of a caregiver's own attachment history. Entering parenthood with hostile–helpless representation of caregiving puts a parent at risk of relating to their child from the extreme stance of either unbalanced behavioral position or of vacillating between their poles. Designed to aid in the identification of the most vulnerable parent–child relationships, the HH system for the PDI may have clinical and research value in the detection of disrupted caregiving and risk for maltreatment or disorganized attachment. This thesis will review the theoretical premise and empirical basis for this system, describe the preliminary adaptation process, and explore the HH caregiving narratives of three interviews in depth.

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CHAPTER ONE: INTRODUCTION

"What a mother brings to the [caregiving] situation . . . derives not only from her native endowment but from a long history of interpersonal relations within her family of origin. . . . How any mother treats any one child, therefore, is a complex product reflecting how her own initial biases have been confirmed, modified, or amplified by her experience with him."

– John Bowlby, 1982

A caregiver carries her own attachment history into the relational world that she coconstructs with her child. This fundamental premise of psychoanalytic developmental theory and practice can be traced to Selma Fraiberg's seminal metaphor of the "ghosts in the nursery" that disrupt and distort maternal caregiving (Fraiberg et al., 1975). Over the last half-century, attachment researchers have provided substantial evidence for this notion, documenting powerful predictive relationships between the quality and organization of parents' representations of attachment, and the degree to which their own child feels safe in both closeness and exploration (Hesse, 2008; Main et al., 1985; van IJzendoorn, 1995). Parental representations of attachment are typically assessed using the Adult Attachment Interview (AAI; George et al., 1984, 1988, 1996), which asks parents to describe experiences with their own caregivers in childhood. It is parents' current representation of those experiences, as opposed to the events of their past, per se, that is considered of central importance in predicting their child's attachment security. That is, parents who are able to describe their childhood attachment experiences in coherent and reflective ways are likely to have children who are comfortable seeking help when they feel frightened, and exploring freely when they feel safe. Likewise, parents whose interviews are

characterized by efforts to avoid or the inability to contain affects surrounding early attachment experiences tend to have infants who try to avoid or are flooded with intense affect when the attachment system is activated.

A striking finding that emerged from this early research was the observation that the narratives of parents with unresolved loss and trauma were often particularly disrupted and chaotic (Main & Hesse, 1990). Lyons-Ruth and her colleagues were the first to note that the interviews of parents who had suffered relational trauma and disturbances in early attachment were specifically characterized by what they described as "Hostile" and "Helpless" states of mind in relation to attachment (Lyons-Ruth, Bronfman, & Atwood, 1999). When describing attachment experiences, these caregivers conveyed either a pervasive sense of helplessness and fear of or a marked hostility toward and identification with their traumatizing caregivers. Lyons-Ruth and her colleagues proposed that disrupted early caregiving relationships confer a vulnerability to the development of these markedly unbalanced representations of attachment relationships, which are then liable to be transmitted intergenerationally through their subsequent influence on parents' manner of relating to their own child.

The study of adult representations of attachment also led researchers to explore the nature of parents' representations of their children, of themselves as caregivers, and of the parent–child relationship (Slade et al., 2003; George & Solomon, 1996, 2002, 2008; Zeanah & Barton, 1989; Zeanah et al., 1994). Parents' representations of caregiving reflect not simply an iteration of previous attachment-related experiences, but their subsequent reconstruction, in part as a function of the relational contributions of the living child (Solomon & George, 1996, 2011). A parent who is plagued by her ambivalence, who cannot tolerate or regulate her affects, or who is unable to modify her caregiving representations through experiences with and of her own child is

impeded in attaining the psychological maturation and flexibility necessary for providing a secure base for her child (Bowlby, 1982; Lyons-Ruth & Block, 1996; Slade et al., 2008).

The research to be described here extends Lyons-Ruth's work on Hostile/Helpless (HH) representations of attachment to the domain of parental caregiving representations, building on both Lyons-Ruth's analysis of AAI narratives and Terry's subsequent work identifying HH representations of caregiving during pregnancy (Terry et al., 2020). Specifically, this research is aimed at examining HH phenomena in parents' representations of their toddlers through the adaptation and application of the HH system to the Parent Development Interview (PDI; Slade et al., 2003), a semi-structured clinical interview that assesses parents' representations of their relationships with their child. The study was conducted in two phases. During the first phase, the HH coding systems (Lyons-Ruth et al., 1995-2005; Terry et al., 2018) were adapted for use with the PDI on the basis of a qualitative analysis of a sample of 20 archival interview transcripts. In the second phase, the adapted coding system was applied and used to describe case vignettes of HH caregiving narratives.

CHAPTER TWO: LITERATURE REVIEW

Attachment Relationships

Attachment refers to the biological and behavioral system that motivates children to maintain proximity to a caregiver who acts as a secure base for exploration of the environment (Bowlby, 1958, 1982; Cassidy, 1999). From an evolutionary perspective, the biological function of the attachment bond between parent and child is to promote the proximity to and protection from a more competent other that is necessary to ensure the relatively helpless infant's survival. While basic protection from threat is considered the most fundamental function of the evolutionarily driven attachment system, the attachment system also serves as a critical regulator of affect-related physiological arousal and emotional distress. In his seminal work on this subject, John Bowlby put forward two central hypotheses; first, that individual differences in the quality of infant-caregiver attachment relationships are largely the product of the history of interaction with the caregiver, and second, that variations in attachment quality were the foundation for later individual differences in personality (Bowlby, 1958, 1969, 1982). Thus, although the attachment system is foremost a biologically motivated regulator of threat and affective experience, its organization is an outcome of individual experience within relationships (Bowlby, 1958; Cassidy, 1994; Schore, 2001; Slade, 2000; Sroufe, 1979).

From a neurobiological perspective, early attachment relationships derive their significance due to their influence on the development of brain structures implicated in important aspects of social, emotional, and self-regulatory functioning (Fonagy et al., 2002; Kim, 2015; Schore, 2001; Siegel, 2012). Areas of the right hemisphere within the prefrontal cortex that regulate somatic processes and affective communication are actively developing during this period, and patterns of interpersonal communication during these early years appear to have a powerful effect on the development and organization of neural circuits related to functioning in these domains (Schore, 2000, 2001). This research indicates that not only is regulation of emotion practiced in early dyadic exchanges within attachment relationships, but also that these exchanges are vital for the basic tuning of excitatory and inhibitory systems in the brain itself (National Scientific Council on the Developing Child, 2004; Schore, 2000, 2005).

Because explicit memory does not begin to develop until the middle of the second year, the experiences that shape infants' minds in the earliest months of life are never explicitly available later on. Yet these early experiences have an enduring impact on implicit processes, influencing individuals' subsequent engagement with the self, others, and the world as a result of their role in the establishment of emotional, behavioral, perceptual, and pre-representational functioning. The capacities to group and represent primary affect states, and to experience the connections between affect, behavior, and the body develop during the first year, and contribute to the encoding of mental representations that are carried forward as templates for interaction in the world. To make sense of the fundamental organization of an individual's mind, then, it is imperative to understand how affects and experiences were known and regulated within early caregiving relationships.

Bowlby's formulation emphasizing the quality of early adaptation and continuity in experience provides a framework for conceptualizing dysfunctions in early relationship patterns and their links to maladaptive outcomes (Slade, 2000, 2014; Sroufe et al., 1999). From this perspective, insufficient or dysfunctional early attachment relationships can be viewed as a marker of risk or vulnerability, and many manifestations of impaired coping in childhood or adulthood can then be viewed as having, in part, an early relational origin. The child internalizes a maladaptive early dyadic regulatory style, and that prototype serves to inform characteristic modes of emotional regulation and associated expectations, attitudes, and beliefs. Subsequently emerging developmental competencies are organized in accordance with these patterns of impaired self-regulation and relatedness. An attachment history in which needs for comfort and safety were not met, or were met insensitively or inconsistently, leads the child to approach future interactions in ways that reflect an expectation of insensitivity, rejection, or unpredictability. Over time, this organized set of expectations and interactional patterns informs the boundaries of the individual's engagement with her inner and relational world, and in doing so, ultimately influences her own caregiving capacities.

Attachment Classification in Infancy

Though first introduced by Bowlby, the development of stable, predictable adaptations of affect regulation in the form of attachment patterns was substantially elaborated by Mary Ainsworth and Mary Main. Infants are active and perceptive participants in caregiving relationships, communicating their physical and emotional needs through behavioral cues and quickly developing expectations of their environment and its boundaries. In the context of their near-complete dependence, infants ensure that their needs are met by developing patterns of expressing or suppressing those cues in accordance with their caregiver's capacity to recognize and respond sensitively to them (Ainsworth et al., 1978; Cassidy, 1999; Slade, 2000, 2014). The patterns of interaction that emerge form a blueprint for that child's future relating as well as their behavioral and cognitive models for regulating affective experience (Cassidy, 1994; Main et al., 1985; Slade, 2000, 2014); "in essence, the structure and functioning of the child's mind is determined by the types of feelings that are recognized and allowed expression within the dyad" (Slade, 2000, p. 1151).

In the 1960s, Mary Ainsworth, who was a longtime colleague of Bowlby's, developed the first system for classifying individual differences in attachment behavior. These differences were understood to reflect the exigencies of a child's relationship with their parents. She began by developing a standardized laboratory procedure known as the Strange Situation Procedure (SSP; Ainsworth & Wittig, 1965; Ainsworth et al., 1978), during which children were observed across multiple episodes of separating from and reuniting with their parents. Their response in the SSP led to their being classified as *secure*, *insecure-avoidant*, or *insecure-resistant/ambivalent* with respect to attachment. Ainsworth's system for classifying infant attachment on the basis of mother–infant interaction provided strong support for Bowlby's position that iterative relational experiences within early primary caregiving relationships lead to the formation of stable patterns of interpersonal engagement and behavior.

Secure attachment relationships develop in the context of care that is predictably sensitive and responsive to the infant's needs, creating a sense of safety that encourages the child to explore both their inner and external world. Secure attachment in infancy provides a foundation that predicts positive adaptation and resilience, as these exchanges foster the development of children's positive expectations of their social world, and of their self-concepts as potent agents of change within that world. It is within a framework of available care and positive self-regard that children develop adaptive emotion regulation patterns, flexible problem-solving skills, and an expectation of perseverance in the face of adversity. A substantial corpus of research supports the notion that attachment history influences the manner in which children construe themselves and their environments, showing that children with secure histories are less likely to attribute hostile intentions to others in ambiguous social scenarios and more likely to view themselves as connected to important others in their lives (e.g., Sroufe, 2005; Sroufe et al., 1999, 2010).

Insecure attachments, by contrast, form when caregivers are unable or unwilling to meet the child's need for attuned and contingently responsive care. Caregivers who are inconsistent, dismissive, frightened, or frightening cannot provide the emotional and physical safety that is necessary to support the infant's optimal development (Abrams et al., 2006; Grienenberger et al., 2005; Lyons-Ruth & Spielman, 2004; Lyons-Ruth, Yellin, et al., 2005). Unlike secure infants who learn that they will receive comfort and soothing from attachment figures when frightened or distressed, the insecure infant is forced to tailor the expression of his attachment needs to the specifics of the caregiving context. The infant's intrinsic motivation to sustain primary attachments ensures that he will adapt his responses to the nature of his caregiver's emotional and behavioral restrictions, even when doing so necessitates the distortion of instinctive responses. Research has shown that infants whose caregivers "rejected, ignored, or somehow distorted their needs developed less functional and adaptive means of communicating their needs when distressed and seeking comfort" (Slade, 1999, p. 798), portending vulnerability in the child's emerging sense of self and others, and in the capacity to regulate the breadth of affective experience.

The avoidant and resistant/ambivalent patterns of insecure attachment, also known as the "organized" insecure patterns, essentially reflect the amplification of one set of developmental needs over another (Ainsworth et al., 1978). Infants who are classified as insecure-avoidant have learned to deactivate their attachment system, suppressing the expression of attachment behavior in order to maintain access to a caregiver who rejects the infant's bids for closeness. Infants classified as insecure-resistant have learned to hyperactivate their attachment system, expressing attachment behavior with greater frequency in order to maximize the chances that their inconsistent caregivers will be responsive (Cassidy & Mohr, 2001). Despite the development of

these accommodations to their caregiving milieus, the caregiving environment has provided enough predictability for infants classified in either category to develop a coherent, organized strategy for maximizing access to a protective caregiver.

Attachment Classification in Adulthood

In the 1980s, Mary Main extended Ainsworth's work on the behavioral patterns of attachment in infants in two pivotal ways. When the children in her longitudinal study of mother–infant attachment were 6 years old, Main became curious about the attachment organization of their parents and initiated a "move to the level of representation" (Main et al., 1985) through the systematic examination of adult mental representations of attachment. According to attachment theory, repeated interactions with caregivers provide the relational context through which children develop the earliest psychological representations of self, other, and self in relation to others. As these largely unconscious expectations become elaborated and organized, they form "internal working models" (Bowlby, 1973) that are carried forward as prototypes for interaction, guiding children's interpretations and behaviors in new situations.

Along with Carol George and Nancy Kaplan, Main developed the Adult Attachment Interview (AAI; George et al., 1984, 1988, 1996) to assess the quality of mental representations of attachment in adults through queries pertaining to the individual's parental relationships and childhood experiences of loss, rejection, and separation. The analysis of patterns of thought, memory, and affectivity within AAI narratives led to the identification of three initial patterns or "states of mind" regarding attachment (Main & Goldwyn, 1984). Deemed the *secure*, *dismissing*, and *preoccupied* categories of adult attachment, these patterns are analogous to the infant attachment classifications of *secure*, *avoidant*, and *resistant/ambivalent*. The observed representational patterns reflect not simply the facts of individuals' childhoods, but the quality of the representation of those experiences; that is, the security attributed to an AAI narrative is not a direct corollary of real life experiences, but a reflection of the coherence and integration with which those experiences are represented (Main et al., 1985).

The delineation of adult categories of attachment allowed Main and her colleagues to evaluate the relationship between parents' attachment classifications and those of their children. In this foundational work on the intergenerational transmission of attachment patterns, they found high rates of concordance: infants who had been classified as secure at 1 year were more likely to have mothers with secure states of mind, while infants classified as avoidant were more likely to have mothers categorized as dismissing of the impact of early attachment experiences, and those classified as resistant were more likely to have mothers who demonstrated a preoccupied state of mind in relation to attachment experiences (Main et al., 1985). Studies have since affirmed a remarkable capacity to predict the quality of parent–child attachment from parental classification on the AAI (Bakermans-Kranenburg & van IJzendoorn, 2009; Verhage et al., 2016).

Disorganized Attachment in Infancy

Mary Main's second revolutionary contribution to the field of attachment theory and research was her discovery of a fourth category of attachment, *insecure-disorganized* (Main & Solomon, 1986, 1990). Recognizing that some infants observed in the SSP at 1 year could not be reliably classified in Ainsworth's tripartite system, she and Judith Solomon reviewed several hundred videotapes of infants from both maltreated and low-risk samples whose SSPs they had deemed "unclassifiable." The infants were evidently not secure, but neither could they be classified as avoidant or resistant. Close video observation revealed that these infants demonstrated an array of behaviors suggestive of both distress or fright while in the proximity of

their caregiver and the absence of an organized strategy for coping with their experience. Main and Solomon (1986, 1990) proceeded to develop guidelines for identifying this disorganized behavior, suggesting that infants should be classified as "disorganized/disoriented" in the SSP when they exhibited atypical behaviors, such as freezing, stilling, mistimed movements, or dazed expressions, during separation from and reunion with their caregivers.

A basic assumption of attachment theory is that the infant will do what is necessary emotionally, cognitively, and behaviorally to maintain primary attachment relationships. Infants who are significantly and chronically frightened by aspects of their caregiving environment are thought to be at risk for "fright without solution" (Hesse & Main, 1999), in which the development of an organized attachment strategy remains elusive. The caregiving environment is so unpredictable, violent, bizarre, or otherwise frightening that a coherent strategy for ensuring safety through proximity to an attachment figure cannot develop (Cassidy & Mohr, 2001; Hesse & Main, 2000, 2006; Main & Hesse, 1990). When the attachment figure becomes the origin of the infant's fear, the infant is faced with the conflicting, simultaneous motivations to both avoid his caregiver and seek proximity to her. For these infants, the caregiver is both the solace from and source of fear, as "the human infant has no haven of safety beyond its attachment figure(s)" (Hesse & Main, 2000, p. 1104). The disorganized attachment classification is thus thought to reflect the ensuing breakdown of an attentional and behavioral strategy for coping with stress (Hesse & Main, 1999).

Longitudinal Trajectories of Disorganized Attachment

A profound reorganization of attachment behavior often takes place as the dysregulated, disorganized infant gradually acquires the capacity to represent and respond to the caregiver's states of mind. As an increasingly complex internal working model forms, the attachment system comes to exist on both a behavioral and a representational level (Main et al., 1985; Slade, 2000). By preschool age, many formerly disorganized children have conceded their attempts to engage the parent in helping to modulate their stressful arousal, instead developing "controlling" strategies of attachment in an effort to maintain the parent's attention and involvement on the parent's own terms (Lyons-Ruth, 2007; Main & Cassidy, 1988; Main et al., 2005; Solomon et al., 1995). This controlling attachment designation in childhood is viewed as evidence of disorganized attachment in infancy as, from a relational perspective, it provides evidence of disorganization in the functioning of the caregiving system and relational hierarchy between parent and child (Cassidy & Mohr, 2001).

The child who employs a controlling-punitive attachment strategy attempts to gain dominance and control by entering into angry, coercive, or humiliating interactions with the parent, while the child who develops a controlling-caregiving attachment strategy displays precocious caregiving behavior toward the parent by engaging in organizing, entertaining, or nurturing interactions (Main et al., 2005). In their longitudinal study of formerly disorganized infants, Lyons-Ruth and her colleagues observed that:

By the time of the age 7 observation we see an almost perfectly role-reversed relationship. The formerly sad and scowling infant has become a sparkling, entertaining child who willingly gives over the etch-a-sketch to her mother to play with, who deftly turns her mother's hostile teasing into cause for laughter, and who does her best to be an attentive and supportive presence, following into her mother's focus of attention on manipulating the etch-a-sketch dials and praising her mother's success. (Lyons-Ruth, 2007, p. 611)

This role-inverting behavior toward the parent in middle childhood is a well-replicated sequelae

of disorganization in infancy (Hesse & Main, 2000); these forms of disorganized behavior can also be reliably assessed in adolescence (Obsuth et al., 2014).

Of the insecure forms of attachment, the disorganized attachment classification is considered the most pernicious and is associated with heightened risk for an array of long-term negative outcomes (Carlson, 1998; Lyons-Ruth & Jacobvitz, 2008, 2016). Unsurprisingly, given the failures of the disorganized attachment relationship to buffer the infant from stress both external to and within the relationship itself, numerous meta-analyses have affirmed the relevance of disorganized attachment relationships to the understanding of both child and adult forms of psychopathology (Bakermans-Kranenburg & van Ijzendoorn, 2009; Fearon et al., 2010; van Ijzendoorn et al., 1999). Disorganized attachment behavior in infancy has been consistently linked to disruptive and aggressive behavior in middle childhood and significantly predictive of dissociative symptoms from middle childhood through young adulthood (Carlson, 1998; Lyons-Ruth, 1996, 2003, 2008; Lyons-Ruth et al., 2016; van Ijzendoorn et al., 1999). Moreover, prospective studies that have followed several family cohorts from infancy into adulthood have shown that family referral for infant services due to caregiving concerns during the first nine months of life, maternal hostile-intrusive behavior toward the infant, and maternal disrupted affective communication with the infant at 18 months of age were all reliably related to the incidence of borderline or conduct symptoms at age 19 (Lyons-Ruth, 2003, 2008; Lyons-Ruth, Holmes, & Henninghausen, 2005).

Parental Unresolved Loss or Trauma

Detection of infants' disorganized behaviors in the SSP and the supposition that these anomalous behaviors were a reflection of the infant's fear of the caregiver led Main, Lyons-Ruth, and others to theorize that the caregivers of infants who are disorganized in relation to attachment are impeded in their caregiving as a result of their own unresolved loss or trauma. This led to the description of the *unresolved/disorganized with respect to loss or trauma* category of adult attachment, in which the effects of trauma or loss are manifest as lapses in narrative fluency and meta-cognitive monitoring, as well as disorientation in time and space (Hesse & Main, 2000). Main and Hesse (1990) argued that the propensity to make conversational and linguistic slips during the AAI is attributable to unintegrated or partially dissociated fear that is aroused by the discussion of unresolved traumatic experiences, proposing that the marked shifts in affect states reflect "frightening and/or overwhelming experiences that may momentarily be controlling or altering discourse" (Hesse, 1996, p. 8).

Main and Hesse (1990) found that parental unresolved state of mind on the AAI was significantly associated with infant disorganization; this link has been replicated in a number of controlled studies (van Ijzendoorn, 1995; van Ijzendoorn et al., 1999; Madigan et al., 2006; for a review, see Lyons-Ruth & Jacobvitz, 2008, 2016). On the basis of their analysis of Main et al.'s (1985) longitudinal SSP and AAI data, Main and Hesse (1990) concluded that unresolved loss leads to the preservation of conflicting representational models that "have not been organized and reintegrated to form a single coherent or non-self-contradictory whole . . . allow[ing] the maintenance of both unintegrated early beliefs and unintegrated fear and anxiety" (Lyons-Ruth & Block, 1996, pp. 258-259). Having been incorporated into multiple, conflicting internal working models of attachment, parents' unintegrated and partially dissociated affects related to unresolved loss and trauma are subsequently reflected in their manner of relating to their infant.

Frightened/Frightening Parental Behavior and Disrupted Affective Communication

Hesse and Main (1990, 1999) suggested that – analogous to the conversational slips observed during AAI narratives – anomalous forms of threatening, dissociative, and fearful

parental behavior might occur in a variety of contexts and be disorienting to the infant. These lapses in speech or behavior were theorized to occur in response to either "spontaneous intrusions from alarming memories or ideation and/or something in the environment idiosyncratically associated with those ideas or memories" (Hesse & Main, 2000, p. 1113). As aberrant stimuli or the intense affects evoked by the parent–child attachment relationship activate the emergence of dissociated fear tied to the caregiver's own early experiences, the caregiver is liable to react to her infant's needs in *frightened* or *frightening* ways (Hesse & Main, 2000). The caregiver's unresolved fear and conflict impinge upon the affective exchanges between the caregiver and her infant, resulting in the caregiver becoming a source a fear for the infant. When the person from whom the child seeks comfort and safety is "at once the source of and the solution to its alarm" (Main & Hesse, 1990, p. 163), the child is faced with an irresolvable paradox that leads to helplessness and disorganized attachment behavior.

Hesse and Main (1999) further posited that when caregivers classified as unresolved become peculiarly frightened by aspects of their environment that are unconsciously associated with traumatic experiences, the apparent incomprehensibility of their reactions may be as frightening to the infant as overt threats or maltreatment. Thus, in addition to patterns of blatantly frightening parental behavior, frightened parental behaviors may "seem not only unpredictable as patterns of behavior, but also inexplicable in origin" (Main & Hesse, 1990, p. 176). The infant's ensuing fear of the caregiver, they suggested, leads the infant to behave in incoherent, contradictory ways associated with disorganization. In this way, disorganization may result not only from the infant's direct traumatic experiencing of threatening or maltreating caregiver behavior, but "also as a *second-generation effect* of more subtle behaviors resulting from the parent's own frightened or frightening ideation surrounding experiences of trauma" (Hesse & Main, 2000, p. 1103).

Main and Hesse (1992) developed six scales to identify subtypes of frightening and frightened (FR) parental behavior, which include threatening, frightened, dissociative, timid or deferential, spousal or romantic, and disorganized forms of behavior. Multiple studies have found that maternal FR behavior mediated the relationship between maternal unresolved states of mind and infant disorganization (Jacobvitz et al., 2011; Lyons-Ruth, Bronfman, & Parsons, 1999; Schuengel et al., 1999). Lyons-Ruth, Bronfman, and Parsons (1999) expanded upon this model, suggesting that disorganized attachment could also be the product of markedly insensitive or "disrupted" caregiving, whereby the caregiver perpetually fails to soothe and comfort the infant's expressions of attachment needs. From this perspective, the failure to repair responses, overall lack of response (i.e., withdrawal), or insensitive responding have the potential to be as fear-provoking for the child as behaviors that are directly frightening. This led Lyons-Ruth and her colleagues to develop a broader coding system to capture the varied forms of disrupted affective communication that may provoke fear and disorganization in the infant (Lyons-Ruth, Bronfman, & Atwood, 1999).

The Atypical Maternal Behavior Instrument for Assessment and Classification, or AMBIANCE, coding system (Bronfman et al., 1992, 2007) includes the components of the Main and Hesse (1992) FR coding system as part of five broad dimensions of disrupted parental affective communication: 1) negative-intrusive behavior, 2) role confusion, 3) disorientation, 4) withdrawal, and 5) affective communication errors. Affective communication errors include contradictory cues (e.g., mother invites infant's approach verbally and then physically distances herself) and nonresponsive or inappropriate responses (e.g., mother does not offer comfort to distressed infant). The inclusion of this dimension was based on theorizing that "in addition to displaying directly frightened or frightening behavior, a parent who is experiencing a continuing state of fear around attachment needs is likely to experience competing tendencies to both respond to and avoid the infant when the infant's attachment needs are aroused" (Lyons-Ruth, Bronfman, & Atwood, 1999, p. 51).

A meta-analysis of studies using either the Main and Hesse (1992) FR coding system or the Bronfman et al. (1992) AMBIANCE system indicated that infants whose parents displayed frightened, frightening, or disrupted behavior were 3.7 times more likely to display disorganized attachment behavior (r = .34; N = 851; Madigan et al., 2006). Notably, however, an initial study using both AMBIANCE and FR coding systems in a low-income sample found that the frequency of disrupted communication still significantly predicted infant disorganization with all FR behaviors excluded, supporting the premise that FR behavior is occurring within a broader matrix of disrupted communication (Lyons-Ruth, Bronfman, & Parsons, 1999). Disrupted affective communication specifically has been associated with infant disorganization at both 12 and 24 months, with change in maternal disrupted communication from 12 to 24 months also predicting change infant disorganization (Forbes et al., 2007). These findings lend further support to the notion that an array of contradictory and disorienting maternal fear-related tendencies are associated with infant disorganization.

The Caregiving System

In order for an infant to maintain organized behavioral strategies, a basic threshold of attuned and appropriate responsiveness to attachment cues is necessary to assuage the infant's fear and support his sense of felt safety. A caregiver's ability to provide this protection for her child is a mature transformation of earlier attachment experiences and representations of having been cared for. That is, the manner in which a parent cares for her child is expected to be deeply and implicitly informed by her own experiences of receiving care (Solomon & George, 1996). First conceptualized by Bowlby (1969) as a goal-corrected behavioral system distinct from but reciprocal to the attachment system, the caregiving system is biologically programmed to protect dependent offspring by promoting adaptation and survival. The system is activated by the infant's or child's distress or the caregiver's perception of threat to the child, and deactivated by proximity to the child and mitigation of the perceived danger. A core feature of the caregiving system, once consolidated, is that the caregiver's own attachment needs are directed away from and subsumed to those of the child, whose needs for protection and care take precedence (Solomon & George, 2006).

Solomon and George (1996) have proposed that the adult caregiving system is guided by internal representations of caregiving that are rooted in early attachment experiences but undergo modification during the transition to parenthood and as a function of interaction with the child. Thus, identification with one's own caregivers, whether benevolent or malevolent, as well as the affects and defenses associated with that identification, provide the foundation for an individual's representation of herself as a caregiver and of her child. The quality of a caregiver's internal representations regarding attachment – whether they are coherent, organized, and balanced, or contradictory, disorganized, and broadly negative – directly affects the caregiver's experience of her child and of the caregiving role (Slade et al., 2008). By determining access to thoughts and feelings in relation to the child, these caregiving representations in turn guide parents' expectations and manifest caregiving behavior (Ammaniti et al., 2006; Slade et al., 2008).

A history of trauma associated with early attachment figures, and breaches of trust and protection in these relationships, are likely to predispose a caregiver to struggle when attachment-related affects and identifications are inevitably activated in relation to her own child. The triggering of affects such as longing, rage, or fear also initiate defensive maneuvers and affect regulation strategies, with the result being that the rigid defensive organizations that serve to inhibit the caregiver's re-experiencing of early vulnerability and unregulated distress impede the adaptations that she must make to meet her child's needs. In this way, there is an inherent relationship between the experience of unresolved fear, on the one hand, and "the openness of the caregiving system to hear, to respond to, and to help modulate fear-related affects" (Lyons-Ruth, Bronfman, & Parsons, 1999, p. 38), on the other.

A caregiver whose parents were unable to provide adequate soothing and comfort in childhood must thus use "a variety of psychological mechanisms to guard against the reexperiencing of the fear, helplessness, and rage associated with earlier trauma" (Lyons-Ruth & Block, 1996, p. 272). Instead of or in alternation with hostile or intrusive behaviors, such caregivers may resort to avoidant defenses, including restricted affective responsiveness or withdrawal, derealization or depersonalization, or other dissociative symptoms. These caregiver adaptations interfere with the attuned responsiveness sought and expected by the infant in moments of distress. The caregiver's need to regulate her own arousal takes precedence over the infant's needs, creating a dynamic that renders the dyad's interactions imbalanced and less mutually regulated (Lyons-Ruth, Bronfman, & Parsons, 1999). Under these relational conditions, the caregiving system is liable to become disorganized or disabled on both the behavioral and representational levels, such that mental representations of the attachment relationship become discontinuous and contradictory.

A caregiver who has not experienced the restoration of safety and regulation in relation to her own experiences of fear and loss may well find that her infant's pain and fear evokes these unresolved fearful affects, as well as her helplessness with regard to ameliorating them in her infant. Importantly, Solomon and George (1996) have suggested that:

situations are potentially disorganizing to the caregiving system to the extent that they engender feelings of helplessness in the mother. They may simultaneously force the mother to question her ability to protect her child and arouse the mother's own attachment system. At these times she may psychologically and behaviorally abandon the infant or child, threaten him or her, or appeal to the child to reassure and protect her. (p.

193)

In other words, when caregivers experience overwhelmingly distressing affects in response to the child's attachment needs, the child's cues are liable to paralyze, rather than activate, the caregiving system (Liotti, 2017; Solomon & George, 1996).

Caregiving Representations

Bowlby's proposal that all behavioral systems are guided at a cognitive level by mental representations lay the foundation for work that sought to explore the caregiving system through parental representations of the child and the caregiving relationship. In an effort to extend Main's pioneering work on adult attachment representations and their link to infant attachment classification, several semi-structured interviews and coding protocols have been developed with the specific intention of examining parental representations of the child and of the caregiving role (e.g., Slade et al., 2003, 2004; Zeanah et al., 1994). Unlike the AAI, which taps into adults' relatively stable representations of past relationships, caregiving interviews provide a view of the parent's representation of the child. Because of the current and evolving nature of the relationship, these representations are dynamic and developing. Through structured or semi-structured interview questions designed to elicit narrative descriptions of affect and experience,

these approaches explore parents' current state of mind as it pertains to a particular child and parent-child relationship.

The Working Model of the Child Interview (WMCI; Zeanah et al., 1994) is a structured interview that was developed to assess parents' perceptions and subjective experience of their infant's individual characteristics and their relationship with the infant. A Likert-type scale is used to assess the interview transcript for qualitative aspects, content, and affective features. Interviews receive an overall classification as *balanced*, *disengaged*, or *distorted*, each of which corresponds to the original categories of adult attachment classification (Zeanah et al., 1994). Research with the WMCI has shown a systematic relation between mothers' classification and infants' concurrently assessed attachment classification (Vreeswijk et al., 2012; Zeanah et al., 1994). Prospectively, women with balanced, as opposed to disengaged or distorted, prenatal representations of their fetus were significantly more likely to have securely attached infants 1 year after birth (Benoit et al., 1997). Crawford and Benoit (2009) have also applied Lyons-Ruth and her colleagues' conceptualization of disrupted caregiving behavior to formulate a *disrupted* representation classification for the WMCI, showing that such representations prenatally were associated with both anomalous caregiving behaviors and child disorganized attachment at 1 year.

The Parent Development Interview (PDI; Slade et al., 2003) is a 20-question interview that asks parents to describe their experience of and relationship with the child, their own internal experience of parenting, and the child's reactions to typical separations and routine upsets. The PDI also asks parents to briefly describe their relationships with their own caregivers. Thus, the PDI activates both the attachment and caregiving systems, and in doing so provides a modality through which to explore and evaluate the mechanisms underlying the intergenerational transmission of attachment security. To date, transcribed interviews have primarily been used to assess reflective functioning (RF) using an addendum (RF/PDI; Slade et al., 2004) to the original RF coding system (Fonagy et al., 1998) that was developed for quantifying an individual's capacity for RF based on their responses to questions on the AAI. Lower scores indicate prementalizing processes, or the inability to consider one's own or another's thoughts and feelings, and higher scores indicate increasing abilities to understand the nature of mental states and the relationship between internal experience and behavior in oneself and others.

A recent validation study found high interrater reliability, internal consistency, and criterion validity for the RF/PDI system (Sleed et al., 2018). Studies using a variety of samples have linked parental RF on the PDI to adult attachment, child attachment, and parental behavior (Borelli et al., 2016; Slade et al., 2005; Stacks et al., 2014; Suchman et al., 2010). The measure has also been linked specifically to indicators of risk in the parent–infant relationship, including disorganized attachment and disrupted affective communication (Grienenberger et al., 2005). While the assessment of parental RF provides valuable insight into parents' capacity to engage with their child's mind, the coding system is not designed to account for qualitative variation in representational content. It may also be limited in its capacity to differentiate among risk in high-risk populations where the parental capacity for mentalization tends to be low to moderate in the majority of cases (Sleed et al., 2018).

Using a modified version of the PDI referred to as the Caregiving Interview, George and Solomon (1996, 2002, 2008) developed rating scales for classification of maternal caregiving representations. Of the four scales, the first three are the organized scales of *flexible integration*, *rejection/deactivation*, and *uncertainty/cognitive disconnection*. These scales, which are intended to identify forms of defensive processing associated with caregiving representations, have been

associated with the organized categories of secure, avoidant, and ambivalent attachment, respectively (George & Solomon, 1996, 2008). A fourth scale for *helplessness*, which detects mothers' descriptions of themselves or their children as helpless, has been concurrently associated with disorganized/controlling classification in their early school-age children (Solomon & George, 2011). George and Solomon have also found parallels between the *constricted* or *flooded* nature of children's doll play and their mothers' narratives. Mothers of flooded children depicted intensely angry confrontations and punitive battles of will with the child, while mothers of constricted children depicted themselves as withdrawing from the child in moments of overwhelming affect, described their child as precociously caregiving, or manifested narrative constriction in the interview itself (Solomon & George, 2006).

Studies of caregiving representations converge in describing mothers of secure children as flexible, balanced, and integrated, as well as in documenting associations among caregiving classifications, parental behavior, and child attachment classification (Bernier & Dozier, 2003; Benoit et al., 1997; Biringen et al., 2000; Borelli et al., 2016; George & Solomon, 1989, 1996; Grienenberger et al., 2005; Oppenheim et al., 2001; Oppenheim & Koren-Karie, 2002; Slade et al., 1999; Slade et al., 2005; Steinberg & Pianta, 2006; Zeanah et al., 1994). This research has linked maternal autonomous classification on the AAI to the parental experience of joy and pleasure, which was in turn associated with less negative and more positive parenting (Slade et al., 1999), and it has linked maternal mind-mindedness, RF, insightfulness, and empathetic understanding to children's secure attachment classification, as well as their relative absence to children's insecure attachment (Bernier & Dozier; Oppenheim et al., 2001; Oppenheim & Koren-Kari, 2002; Slade et al., 2005). Despite their utility in describing the multiple ways that caregiving representations affect parenting and child outcomes, the various scales described above are not oriented toward the more pervasively disorganized and contradictory representational features that underlie the highest-risk caregiving relationships. The hostile– helpless relational diathesis model and associated coding system provide a theoretical and empirical approach with the capacity to detect narrative manifestations of mental states associated with significant trauma, disturbances in attachment, and severe psychopathology.

Hostile–Helpless Relational Diathesis Model

The diathesis stress model suggests that maladaptation is an outcome of interactions between one's predispositional vulnerability and subsequent exposure to environmental stressors. Lyons-Ruth and her colleagues have posited that inadequate early regulation within the caregiving dyad constitutes an additional form of vulnerability, such that stress-related dysfunction is the collective corollary of genetic vulnerability to stress, the specific nature of the stressor, and the capacity of an individual's attachment system to reduce stressful arousal to homeostatic levels. Lyons-Ruth, Bronfman, and Atwood (1999) have proposed that a caregiver's unresolved fear impairs the attachment relational system and leads the child to identify either with the caregiver's hostility (i.e., frightening behavior) or helplessness (i.e., frightened behavior). Thus, a hostile–helpless relational diathesis results when a caregiver's own unresolved fear provokes fear in her infant that goes unmonitored or unrepaired, and as a result, transmits unintegrated mental and behavioral strategies intergenerationally.

On the basis of their observations of disorganized mother–infant dyads, Lyons-Ruth, Bronfman, and Parsons (1999) identified two subtypes of maternal behavior that correlated with subtypes of disorganized infant behavior observed in the SSP. The first subgroup of mothers exhibited significantly higher rates of self-referential behaviors and negative-intrusive behaviors, often displaying a contradictory mix of rejecting and attention-seeking behaviors toward their infants. The infants of these mothers displayed both disorganized behaviors and high rates of avoidant and resistant behaviors (e.g., backing away from the mother, or continued expressions of distress or anger in the mother's presence). The second subgroup of mothers was more difficult to identify, as these mothers were unlikely to be overtly hostile or intrusive but exhibited significantly higher rates of hesitation and withdrawal in the face of infant attachment behaviors (Lyons-Ruth, Bronfman, & Atwood, 1999). These mothers tended to give in to their infant's concerted efforts to establish contact, but often after first hesitating, moving away, or trying to deflect the infant's requests. Their infants all continued to seek maternal contact, despite also displaying disorganized behaviors including signs of fear, helplessness, or depressed mood.

Although the two polarized behavioral profiles observed among these mothers appeared superficially to be quite different, Lyons-Ruth, Bronfman, and Atwood (1999) advanced the theory that the divergent constellations of parenting behavior could be meaningfully understood as alternate behavioral expressions of a single underlying hostile–helpless dyadic internal model. Because relational trauma often involves victim-aggressor relationships, Lyons-Ruth and her colleagues proposed that parents' unintegrated relational trauma has the potential to confer a vulnerability to "hostile" and "helpless" caregiving stances as a corollary of the caregiver's identification with either or both the victim or aggressor stance (Lyons-Ruth, Bronfman, & Atwood, 1999). Caregivers whose stance toward parenting is primarily hostile are thought to have identified with the aggressor as a way of defending against awareness of their own and their infant's vulnerability. More helpless caregivers, on the other hand, have continued to experience others, including their infants, as malevolent and threatening, and have maintained an internal representation of the self as frightened, overwhelmed, or incapable.

Hostile-helpless relational patterns are thought to derive from an unbalanced internal

working model of attachment that is shaped over the course of the caregiver's own attachment history (Lyons-Ruth, Bronfman, & Atwood, 1999). Indeed, Lyons-Ruth and her colleagues have speculated that these two forms of parental behavior correlated with subtypes of disorganized behavior in infancy provide the relational context for the emergence of the two distinct controlling-caregiving and controlling-punitive stances observed among formerly disorganized school-age children (Lyons-Ruth, 2002). These working models are actualized within caregiver– infant relationships in which the caregiver's initiatives are elaborated at the expense of the infant's. Parents who maintain a hostile–helpless internal working model of relationships are disposed to engage in interactions with their child from either or both poles of these markedly unbalanced behavioral positions (Lyons-Ruth, 2002). The relationships that develop as a result are likely to both offer insufficient protection for the resolution of perceived threat or trauma and contribute to the formation of contradictory behavioral and mental processes.

Hostile/Helpless Coding System

The Hostile/Helpless (HH) classification system (Lyons-Ruth et al., 1995-2005) was developed to identify unintegrated, disorganized states of mind pertaining to attachment, in an effort to capture phenomena relevant to disturbances in early attachment and more severe psychopathology. While meta-analysis has revealed that 53% of disorganized infants had mothers with unresolved states of mind (van Ijzendoorn, 1995), a robust effect, this nonetheless leaves 47% of disorganized infants unaccounted for by maternal unresolved status. One proposed explanation for this discrepancy is that the unresolved classification can only be assigned if the participant reports a specific loss or abuse experience during the course of the interview; such discourse may constitute too narrow a window for capturing the breadth of anomalous attachment representations observed among adults with more complex trauma histories (LyonsRuth & Jacobvitz, 2016; Melnick et al., 2008).

The HH coding system is thus intended to capture more pervasive anomalies described by subjects on the AAI, and focuses on indices of pervasively contradictory evaluations of the attachment relationship itself, rather than on lapses in monitoring during discussion of loss or trauma. The HH classification system detects mental states that indicate globally negative evaluations of one's caregivers and oneself that remain unintegrated with other aspects of mental models regarding attachment. This frequently manifests in the proclivity to mentally represent and identify with attachment figures in contradictory and malevolent ways (Lyons-Ruth et al., 1995-2005; Melnick et al., 2008). Accordingly, the HH coding system has particular relevance to understanding the mental representations involved in the intergenerational transmission of relational trauma and maltreatment.

HH states of mind present on the AAI as globally derogating and explicitly contradictory emotional evaluations of caregivers and self. Generally, one or more caregivers are described in all-encompassing devalued terms (either as malevolent or as abdicating the parental role), yet opposing evaluations of the same caregiver are made at other points in the transcript without metacognitive comment (e.g., "my mother was evil" / "we were very close"). The global nature of the individual's representation is viewed as an indication that the person has not sufficiently integrated assorted thoughts and feelings to a point where self or others can be seen as multidimensional, simultaneously encompassing both positive and negative attributes (Melnick et al., 2008). Other forms of contradiction and disavowal of vulnerability also tend to be present. These opposing, unreconciled evaluations of attachment relationships and affects distinguish HH narratives, leaving the coder with the impression that the subject is not conscious of the contradictions and has not reworked deeply ingrained representations of self and other. Individuals classified as HH are thought to be struggling with unintegrated affects such as fear, rage, and guilt in relation to an attachment figure perceived as frightening. Accordingly, they employ the kinds of defenses against affect states that are prevalent in chronically traumatized populations, often resulting in an emotionally vivid but disjointed narrative that suggests their experience of the trauma is still immediate and unresolved (Lyons-Ruth et al., 1995-2005). The "Hostile" subtype captures the subgroup of individuals who tend to represent attachment figures in malevolent terms and identify with a hostile or punitive attachment figure, while the "Helpless" subtype refers to the subgroup of individuals whose transcripts reveal a pervasively fearful or passive quality and who may be identified with (and often were caretaking of) a parent who is nonetheless globally devalued as helpless or abdicating the parental role. Individuals who demonstrate features from both subtypes in different relationships or at different points in the transcript are classified as a "Mixed" subtype.

Empirical Evidence for Hostile/Helpless System

There is now strong evidence for a relation between HH states of mind on the AAI and severity of traumatic experiences in childhood. In a sample of young adults, HH representations were robustly associated with childhood abuse severity, with the relation between abuse severity and later borderline and antisocial personality features mediated by whether or not abuse was further associated with HH representations of attachment figures (Finger et al., 2015). These findings suggest that borderline and antisocial features may be more likely to emerge among individuals with abuse histories who maintain unintegrated representations of attachment relationships into adulthood (Finger et al., 2015). HH states of mind have also been significantly related to both childhood abuse and dissociative symptoms in another sample of low-income young adults (Byun et al., 2016). Studies that have demonstrated high rates of HH classification

within samples of mothers being followed by social services have likewise reported an association between maternal HH states of mind and severity of maltreatment history (Barone & Frigerio, 2009; Frigerio et al., 2013; Milot et al., 2014).

In another high-risk sample, maternal childhood trauma severity was related to HH states of mind, which in turn predicted infant disorganization (Lyons-Ruth et al., 2003). In this study, HH classification on the AAI was significantly associated with infant disorganized attachment at 18 months, whereas unresolved status on the AAI was not. Interestingly, unresolved status was a stronger correlate of infant disorganized attachment at 12 months, but did not add to the prediction of disorganization at 18 months. That maternal trauma severity was related to HH states of mind, which in turn predicted infant disorganization at 18 months, suggests that the influence of maternal trauma on infant attachment may become more prominent as the infant transitions to toddlerhood (Lyons-Ruth et al., 2003). In this sample, HH states of mind were significantly related to the extent of disorganized attachment behaviors displayed by the infant at 18 months and accounted for variance not associated with the unresolved classification (Lyons-Ruth, Yellin, et al., 2005). HH representations were also related to disrupted mother–infant affective communication, which mediated the relation between HH states of mind and infant disorganization (Lyons-Ruth, Yellin, et al., 2005).

The HH system has also predicted maltreatment-related outcomes beyond infant disorganization per se. HH states of mind have differentiated at-risk parents who were maltreating from those who were non-maltreating beyond variance explained by unresolved states of mind (Frigerio et al., 2013). Rates of HH classification have further been shown to increase in relation to risk status in sociodemographically matched samples, ranging from 9% in a low-risk community sample, to 60% in a maltreatment risk sample, and 75% in a maltreating sample (Frigerio et al., 2013). Maternal HH states of mind have also been shown to uniquely contribute to the prediction of filicide among at-risk mothers (Barone et al., 2014).

Most recently, when the HH system was applied to pregnancy narratives, HH states of mind during pregnancy predicted child removal by protective services within the 2 years following the infant's birth (Terry et al., 2020). Mothers whose infants were removed from their custody had significantly higher HH scores during pregnancy than mothers of infants who were not removed from their care, with the relation between HH classification and infant removal status also significant. These preliminary findings suggest that HH mental states in the narratives of pregnant women may serve as markers for identifying risk for child abuse and neglect before the child's birth. Collectively, these findings bolster the premise that the assessment of defended, unintegrated HH states of mind can be meaningfully used to evaluate caregiving risk.

Statement of Purpose

The project described here was aimed at developing a system for coding hostile and helpless representations of caregiving in parenting narratives. Though parents' representations of themselves as caregivers and of their children begin to form long before the living, breathing child is front of them (Fraiberg, 1980; Slade et al., 2008; Solomon & George, 1996; Terry, 2018), the actual, real experience of parenting a particular child has the potential to elaborate, modify, or transform prior representations of attachment relationships. This makes the period between a mother's pregnancy and her child's first years of life rich in the possibility for interrupting the intergenerational transmission of insecure attachment and its sequelae.

Current systems for assessing parenting narratives lack the capacity to capture the aggressive, confused, and irreconcilable qualities of severely disturbed representations. An HH system for use with parenting narratives could have the capacity to evaluate representational

markers associated with disorganized attachment and child maltreatment in the context of parents' current and unfolding relationships with their young children. Given the welldocumented associations between HH representations and negative outcomes, the detection of HH phenomena in the narratives of caregivers whose experiences of trauma and attachment remain immediate and unresolved may offer a novel indicator for prevention and intervention efforts.

Thus, the intention of the current study was to extend the existing body of HH work by developing a preliminary instrument with the capacity to detect HH content and assess its severity in caregiving narratives. The three specific aims were as follows:

- To examine the form and content of Hostile/Helpless phenomena as they present on the Parent Development Interview (PDI; Slade et al., 2003) through an exploratory qualitative analysis of 20 interview transcripts.
- 2. To develop a preliminary Hostile/Helpless coding manual for use with the PDI.
- 3. To qualitatively examine the themes, content, structure, and other basic qualitative elements of Hostile/Helpless representations within three parenting narratives in depth.

CHAPTER THREE: METHODS

Sample

The sample for this study consisted of 20 first-time mothers who were enrolled in the *Minding the Baby*[®] (MTB) longitudinal study. MTB is an intensive, interdisciplinary, homevisiting intervention program for first-time mothers and their children that begins during pregnancy and continues for 2 years after childbirth. The intervention is aimed at addressing both the physical and mental health needs of women whose risks in both domains are amplified by the coexisting stressors of poverty, youth, and multiple generations of sociodemographic risk and adversity. The relationship-based approach central to MTB integrates nurse home-visiting and infant mental health models of care, with a core emphasis on the promotion of secure parent– child attachment relationships. Led by principal investigators Lois Sadler, RN, PhD, Arietta Slade, PhD, and Linda Mayes, MD, in a collaboration between the Yale Child Study Center, the Yale School of Nursing, and community partners, the MTB model has been rigorously evaluated in two federally funded randomized controlled trials (Sadler et al., 2013; Slade et al., 2019).

Study participants were recruited from two community health centers that deliver care to a medically underserved population of families, most of whom live at or below the poverty line and have diverse cultural and ethnic heritages. Participants were primarily English-speaking and between 14-25 years of age at the time of their enrollment during pregnancy. Active cocaine or heroin use and serious or terminal medical conditions precluded participation. Participants were at high risk for the development of insecure parent–child attachment relationships, with structural barriers related to chronic poverty exacerbated by personal histories of trauma and abuse, depression, post-traumatic stress, domestic violence, and familial substance abuse. Participants were randomly assigned to the control or intervention group. Control group participants received routine prenatal and postnatal well-woman health visits and well-baby health care at their community health center. The intervention group received weekly home visits, alternating between the nurse and social worker, beginning in the late second or early third trimester of pregnancy. Weekly visits continued until the child's first birthday, at which point they occurred every other week until the child was 2 years old. All intervention families continued to receive their routine health care from their community health center. A variety of measures pertaining to aspects of child development, infant attachment, mother–infant interaction, maternal RF, and maternal psychopathology were administered to participants in both groups during research sessions at baseline, 4, 12-14, and 18-24 months. The majority of the study's research instruments were administered to both control and intervention mothers at home by a research assistant, though the mother–child assessments took place in a laboratory space at a location convenient to families' homes.

Measure

Parent Development Interview – Revised (PDI; Slade et al., 2003): The PDI is a semistructured, 20-question clinical interview that assesses parents' representations of their relationship with their child. The interview asks parents to describe their relationship with and experience of their child, their own internal experience of parenting, including how that experience may be affected by their own histories with caregivers, and the child's reactions to routine upsets and separation events. Prior research using the PDI has indicated acceptable levels of validity and reliability (Aber et al., 1999; Slade et al., 1999; Sleed et al., 2018).

Procedure

The sample for this study (N = 20) was selected from the broader cohort enrolled in the

MTB longitudinal study. The PDI was administered to mothers by a research assistant near the completion of their participation in the study. Interviews were conducted at the subject's home, the Yale Child Study Center, or one of the community health clinics. The majority of this sample was enrolled in the control group (n = 16).

The majority of mothers identified as Latina and their mean age at the time of the interview was 20 years (range 17-26 years). Slightly over half of the subjects' children were male (n = 13) and the mean age of the subjects' child at the time of the interview was 23 months (range 13-27 months). The sample was comprised in approximately equal measure of subjects with children who were classified as disorganized (n = 9) and as organized (n = 11) in the SSP at 12-14 months. Among the children classified as organized, 2 were classified as secure, 4 were classified as insecure-avoidant, and 5 were classified as insecure-resistant. The average disorganization score in the SSP for the sample was 4.35 (range 1-8). The interview transcripts were deidentified and the author was blind to the subjects' group status and to the attachment classification of each subject's child. The process of adapting the HH classification system for use with the PDI is described in the next section.

CHAPTER FOUR: RESULTS

Part 1: HH Coding System Adaptation for the PDI

Parenting narratives were assessed for Hostile/Helpless (HH) states of mind using a preliminary adaptation of the original HH classification system designed by Lyons-Ruth and her colleagues (Lyons-Ruth et al., 1995-2005) for use with the Adult Attachment Interview (AAI; George et al., 1984, 1988, 1996). The original coding system identifies two core features as characteristic of the AAI protocols of individuals with HH states of mind. First, one or both of the subject's caregivers are represented as hostile or helpless, or both (a "Mixed" model), and second, evidence of overwhelming attachment- and trauma-related affects is present. Individuals with a "Hostile" state of mind appear to identify with a malevolently represented attachment figure, while individuals with a "Helpless" state of mind show evidence of identifying with a helpless or fearful caregiver toward whom they often adopted a caregiving stance in childhood.

HH states of mind are rated on a 9-point scale, with a score of 5 or above resulting in an HH classification. Classification is linked to specific features of the transcript that are captured by a set of 20 indicators, or frequency codes. A subset of these indicators is heavily weighted when assigning a rating on the HH scale, particularly instances when the subject globally devalues their attachment figure as malevolent or helpless/abdicating and also demonstrates identification with that figure. Other significant indicators in AAI protocols include references to a controlling-punitive or controlling-caregiving stance toward an attachment figure in childhood, instances of laughter while describing one's own or others' pain, and any explicit references to past or present fearful affect over the course of the interview. A more detailed description of the original HH coding system is reported elsewhere (Lyons-Ruth, Yellin, et al., 2003, 2005;

Melnick et al., 2008).

The adaptation for assessing for HH states of mind in parenting narratives was also deeply informed by the adapted HH classification system designed for use with pregnancy narratives (HHPI; Terry et al., 2018). Because the original HH system was developed for use with the AAI, which is designed to activate the individual's attachment system, a structural shift was required for its adaptation for use with the Pregnancy Interview (PI; Slade, 2003), which is designed to activate the reciprocal caregiving system that emerges during pregnancy (Solomon & George, 1996; Slade & Sadler, 2018). The coding approach emphasizes the pregnant woman's representations of her unborn baby and their imagined, future caregiving relationship, rather than the childhood experiences of care that are integral to the HH AAI coding system.

The author – who was blind to the subjects' intervention or control group status as well as to the attachment classification of each subject's child – first read a set of 20 deidentified PDIs. The author and Dr. Slade met regularly to discuss qualitative aspects of the interviews, grounding this process in the HH model and existing coding manuals. A rudimentary coding structure was developed on the basis of the AAI and PI manuals and applied to the set of 20 interviews. This initial structure encompassed the subject's representations of herself as a caregiver, of her child, of her own caregivers, and of her child's father or her partner. Because the PDI is, like the PI, structured to activate the reciprocal caregiving system, and because a central aim of the project was to broaden the application of the HH approach to caregiving stances, it was determined that the HH coding system for the PDI should emphasize the caregiver's representations of herself as a caregiver and of her child. Accordingly, HH PDI coding focuses on detecting HH phenomena by assessing a caregiver's representations of and capacity to reflect on her child, their relationship, and her experience as a caregiver, and

relatively less so on important others, including her own caregivers.

Further discussion and detailed review of the full sample of interviews informed an initial set of modifications to the collective set of codes used for the AAI and PI manuals. Dr. Terry, who worked closely with Dr. Lyons-Ruth and Dr. Finger to develop and validate the HHPI coding manual, was particularly consulted at this juncture in the adaptation. Because this study is the first to use the HH system to systematically investigate parenting narratives, the current work reflects an initial phase of adaptation during which the existing HH coding systems for the AAI and PI were adjusted for use with the PDI. Several HHPI codes were adapted for applicability to caregivers' representations of a child, as opposed to a fetus, while several codes from both existing manuals were deemed a poor fit to the current work (e.g., "denial of pregnancy" from the PI manual and "controlling-punitive behavior toward siblings" from the AAI manual).

Heavily weighted codes in the evaluation of HH representations in PDI narratives are *hostile caregiving stance, helpless/abdicating caregiving stance*, and *global devaluation of the self-as-caregiver or of the child.*¹ The codes encompass the representations in narrative that are associated with an HH relational stance towards oneself as a caregiver or one's child. A caregiver with HH caregiving representations may describe herself as malevolent and hostile, or as a frightened, helpless, or abdicating caregiver. She may also express both hostile and helpless features at different points in her narrative. Alternatively or additionally, she may represent her child as hostile, describing the child as an aggressor, as larger than life, as overpowering her, or as destructive to her. She may also portray her child as helpless or abdicating, describing him as passive, fearful, or incapable.

While hostile caregiving representations often contain threatening undertones and more

¹ Italicized terms refer to codes in the HH PDI manual (Kilbride et al., 2020).

blatantly communicate risk for aggressive interactions and child maltreatment, helpless caregiving representations tend to convey a sense of victimization, powerlessness, or being overwhelmed with regard to the caregiving role. The caregiver may describe not knowing what her child wants or needs, or what she should do as a caregiver: "I don't know what to do. When he screams and cries, I give him things, but he don't want them. So I don't know what to give him after." At extreme levels, helplessness may lead parents to abdicate (or wish to abdicate) the caregiving role entirely, as exemplified by the following excerpt, where a mother refers to her 2year-old son and newborn: "I felt like if I wouldn't have had them, I would not be in this situation. I felt like threatening my life and giving them to my mother."

As with the original HH AAI manual, *identification with a hostile caregiver* and *identification with a helpless/abdicating caregiver* are also significant codes; in the context of the PDI, however, these codes derive their significance through their relevance to the subject's internalization of these relationships in ways that inform her own caregiving representations. The subject may display an open identification with a caregiver who is globally devalued elsewhere in the transcript. This can take the form of references to being very close to, similar to, or admiring of the parent. Anger, conflict, and negative consequences of the caregiver's behavior are not clearly stated or integrated at this point in the transcript, but are clearly conveyed in globally devalued terms elsewhere during the course of the interview.

A number of other codes were preserved from the original AAI manual. The *sense of self as bad* code is intended to capture an internalized sense of badness or blameworthiness and is applied to passages in which the subject describes undue guilt or responsibility, deserving disrespect or harm, or being unworthy of positive regard. *Laughter at pain*, which is understood as a defensive behavior to communicate toughness and deny the impact of experiences of vulnerability, is coded when laughter accompanies anecdotes about psychological or physical distress. *Laughter at pain* often coincides with *indicators of an invulnerable stance*, a code that is meant to capture statements explicitly revealing a defensive posture regarding the acknowledgment or expression of vulnerability around attachment- or caregiving-related affects. Theoretically, this disavowal of vulnerability is considered part of an interpersonal strategy in coercive relational dynamics; it likely also serves the psychological function of protecting the self from the awareness of pain.

Several additional codes were also developed in an attempt to capture disorganized attachment phenomena associated with HH representations in vivo, including *role confusion with child*, *references to hostile behavior toward child*, and *indicators of controlling-punitive behavior in child*. Passages receive the code *role confusion with child* when the child is described in a caregiving role, as in the following comment, where a mother is referring to her 13-monthold: "She comes over and she wipes my eyes, she wipes my tears, and she gives me a hug. . . . Um, and I mean, to me, that's just the best because, when nobody's there, she's always there." In another example, when asked how she thought her daughter felt during an incident when the subject was upset, a mother responded: "I think she was like, 'Okay, why is Mommy crying? Something's wrong,' and you know, 'what can I do to make Mommy feel better?'"

The codes *references to hostile behavior toward child* and *indicators of controllingpunitive behavior in child* are both intended to capture representations of behavioral phenomena associated with a hostile relational stance and the sequelae of disorganized attachment. "I, really, I felt like I just kind of wanted to slap the senses back into him" is an example of a comment that would receive the former code. *References to hostile behavior toward child* are coded even when conveyed in a negating form that indicates a denial or disavowal of such impulses, as in the following example: "I feel like she respects me a lot. Like I respect her and she respects me. Like I don't try to – I try not to hit her." The *indicators of controlling-punitive behavior in child* code indexes evidence of a controlling-punitive relational strategy emerging in the subject's child and is apparent in descriptions of the child's physical aggression and antagonistic defiance.

Coding and scoring procedures are detailed in the HH PDI manual. The coder is instructed to read each PDI transcript three times while referring to a coding sheet designed to facilitate the process and organize the coder's impressions on several levels. Following the first reading, which is completed in a single sitting, the coder is prompted to outline their initial impressions as well as any relevant responses to the transcript, as the emotionally evocative but disjointed narratives of HH subjects can render the coder confused or filled with the subject's disowned or dissociated affects (Lyons-Ruth et al., 1995-2005). The coder is then asked to review the transcript for a second time, assigning and tallying frequency codes and specifying any contradictions in the protocol on the coding sheet. Following the third review of the transcript, the coder is directed to write a narrative summary of the interview, detailing their impressions of the subject's caregiving representations.

HH scoring depends upon both the content and structure of the narrative. Specifically, an HH classification on the PDI is contingent both upon whether the subject's representations of herself and of her child are hostile and/or helpless and the degree to which the subject's affects are coherent, integrated, and reflected upon, versus rigidly defended against or experienced as overwhelming and terrifying. As such, contradictory contents and evidence of affective interference in the transcript are considered relevant and evaluated by the coder with the assistance of process rating scales. The contradictory evaluations scale indexes the extent to which contradiction pervades the subject's discourse throughout the interview, particularly in the

form of contradictory statements about the self-as-caregiver, the child, and the subject's own caregivers, but also as manifest in contradictions between accounts of past and present stances, or in contradictions of fact or evaluations of general experiences.

The affective interference, or dissociation, scale indexes the extent to which traumarelated affects appear to interfere with the subject's ability to reflect on and mentally integrate her experiences. High scores on this scale reflect references to *blocking out* mental experience, *denial of abuse*, flashbacks, and contradictions of fact in relation to traumatic experiences. The *blocking out* code is applied when the subject appears to use dissociative mechanisms of compartmentalization in order to cope with overwhelmingly fearful experiences, and indexes references to the use of mental manipulation (e.g., a variation on "I try not to remember") as opposed to a more passive or dismissing process expressed by lack of memory (e.g., "I don't remember much"). The subject is making a partially conscious attempt to suppress her memory and emotion (Lyons-Ruth et al., 1995-2005). Indicators of a breakdown of integrative processes secondary to frightening affects are also observed in *affect-driven confused speech*, which presents in markers of disorientation such as trailing sentences, confusions of person, confused syntax, incomprehensible or vague references, long pauses, and notable sentence fragments. These interruptions in coherent discourse evince an affectively heightened, often ominous quality, and most frequently present when a parent is describing personal vulnerability or psychologically threatening experiences, including loss.

In the final step, the coder indicates whether an HH state of mind (i.e., HH classification) is present or absent and assigns a final HH score (i.e., HH level) on the 9-point HH scale for the transcript. Interviews that receive a score of 5 or above are classified as "Hostile," "Helpless," or "Mixed" and are identified by their lack of integration, contradiction, and absence of reflection

or resolution. Within this upper range (5-9), scores vary according to the extent and severity of the subject's HH mental state. A score of 8 or 9 is attributed to an interview when HH phenomena are pervasive throughout the transcript and/or distinct in their intensity. These transcripts contain markedly contradictory and unintegrated mental contents as well as conspicuously devaluing representations of the self-as-caregiver, of the child, and/or of caregivers, in the context of clear past and ongoing HH relational patterns. These transcripts are typically intensely affective with little reflection, and the coder is left with an overwhelming sense of the disorganization that is inherent to the subject's state of mind.

Transcripts receiving a "Hostile" score of 8 or 9 are typified by the subject's overtly derogating caregiving representations and pronounced defense against vulnerability. These narratives reveal numerous references to malevolent representations of caregiving figures and/or to feelings of hatred or bitterness towards the self-as-caregiver or the child. The subject's current relationship with globally devalued attachment figures, who are represented as wholly malevolent and larger than life, may be completely ruptured. Transcripts that receive "Helpless" scores of 8 or 9 are identifiable by the clear sense that the subject is pervasively overwhelmed and cannot contain her discourse. This pronounced fearfulness or helplessness may manifest in a high level of *affect-driven confused speech* as well as frequent *references to fearful affect* or fear-inducing situations, and the subject will typically represent herself and her caregivers as helpless or abdicating. In either case, the subject appears to have a markedly underdeveloped ability to represent other people's minds or to understand herself psychologically.

Transcripts are assigned a score of 5 when the coder's impression is that the subject only marginally qualifies for an HH classification (Lyons-Ruth et al., 1995-2005). In these interviews, clear indicators of an HH state of mind co-occur with notable instances of coherence or

reflection. A score of 5 would be assigned to a transcript that receives only a few frequency codes, but the instances are striking enough to override an otherwise organized or reflective interview; this score would also be appropriate if the subject shows an appealing sense of reflection or progress toward the resolution of her trauma, and the coder is nearly convinced that the subject has reworked her understanding of the past to arrive at a more flexible and autonomous stance.

Narratives that evince mild to moderate levels of incoherence, but do not present the specific features of HH states of mind, receive scores in the lower range (1-4). A score of 3 would be attributed to interviews in which a subject portrays a general capacity to manage the emotional contradictions that are inherent to caregiving; the subject may struggle with the dialectic between her child's high level of dependence upon her and the child's separateness from her and increasing autonomy, but is aware of this tension and able to reflect on her ambivalence and her experience of parenthood more generally. A score of 1 would be attributed when the subject is able to tolerate revisiting early experiences of having been cared for, to consider her identifications with her own caregivers, and to acknowledge and reflect on vulnerable emotions and ambivalence related to her parenting experiences and her relationship with her child. The consistently coherent content and discourse that characterize these transcripts reflect a well-integrated caregiving stance.

Thus, the parenting narratives of HH subjects on the PDI are typified by their globally derogating hostile or helpless caregiving representations, their contradictory and unintegrated mental contents, and the presence of intense affectivity with little reflection. Having ineffectively segregated incompatible working models of attachment figures, HH PDI subjects may reveal disparate positive and negative caregiving representations that have intermittent, rather than

simultaneous, access to awareness. HH PDI subjects may also continue to identify with a hostile or helpless caregiver, without reflecting on the negative aspects of this identification, and the persistence of this identification may manifest in part in the subject's representation of herself as a harsh parent to her child, or as powerless to influence her child and overwhelmed by the caregiving role.

The resulting coding manual, entitled *Pervasively Unintegrated, Highly Defended/Helpless States of Mind on the Parent Development Interview: A Classification and Coding Manual* (HH PDI; Kilbride et al., 2020), assesses HH representations within the caregiving system. The current manual will continue to be revised and refined based on future research and collaboration.² The preliminary adaptation was used to score the study sample, and the following section reviews the HH qualities of a subset of those interviews in depth.

Part 2: HH on the PDI: Case Vignettes

General Observations

The full set of interviews that comprised this sample was characterized broadly by clear indicators of sociodemographic risk, including references to housing instability, food insecurity, and social services involvement. Mothers frequently described contentious or volatile relationships with their child's father, living in crowded households, and an array of chronic stressors both within their families and broader environments. It was very common across the sample for mothers to report being "best friends" with their child, a marker of role confusion but potentially also a corollary of the young age of mothers in this sample. Likewise, many mothers reported close relationships with their parents in adulthood, and were often living in multigenerational households. The limited resources of the impoverished families and

² For more information, please contact Dr. Arietta Slade at <u>arietta.slade@yale.edu</u>.

juvenescence of mothers in this sample may also have contributed to obscured role boundaries in those relationships. At the same time, some forms of dependent or antagonistic behavior may be developmentally expectable in late adolescence and emerging adulthood (Fingerman & Yahirun, 2015; Granic et al., 2003). As such, the socioecological and developmental context was carefully considered in light of any evidence of hostile or helpless features in each interview.

In order to better illustrate the manifestation of HH phenomena in parents' narratives, the PDIs of three mothers are reviewed below. The parenting narratives of Elena and Sadie were classified as "Mixed" and received scaled scores of 7 and 6, respectively. Mia's narrative was classified as "Hostile" with a scaled score of 8. Sadie and Mia received the MTB intervention. Identifying information has been removed to protect confidentiality.

Elena: Mixed Hostile/Helpless Narrative

Elena was 18 years old and her son was 2 years old at the time of her interview. In addition to her son, she was living with her mother, stepfather, and two younger sisters. Elena described a contentious relationship with her son's father. She spent the majority of her young childhood in foster care and was returned to her mother's custody at age 9. Elena made few apparent attempts to elicit the interviewer's agreement with her view of her experiences over the course of the interview, and her statements about her relationships with her caregivers and with her child conveyed a final, closed quality. Her responses were generally concise throughout, and the coder also had the impression that she was at times excluding relevant details and context.

Elena's frustration with her child was apparent early in the interview, as shown in her initial exchanges with the interviewer about her child:

Interviewer: "Can you give me a sense of the kind of person your child is? We're going to start by choosing three adjectives that describe your child . . ."

Elena: "Okay. He's very loud, he's playful, and he can be annoying sometimes."

Interviewer: "Now let's go back over each of those. You said he was very loud; tell me a little bit more about that."

Elena: "Instead of talking, he yells."

Interviewer: "Can you think of a memory or something that comes to mind with him being loud?"

Elena: "When I don't pay no mind to him."

Interviewer: "And then you said he was playful? Can you tell me a little bit about a time when you think about him and he was being playful?"

Elena: "When I was sleeping and he tries to wake me up by throwing balls in my face." Interviewer: "And I've forgotten what was the last thing you said?"

Elena: "Annoying."

Interviewer: "Annoying – tell me some memory about that."

Elena: "Pulling on me, pinching me, biting me."

The coder's sense that Elena was aggrieved by her child's needs and demands was furthered by comments such as, "It has to be at least two stories read to him before he goes to bed . . . you read one and he will not go to bed," and her response to the interviewer's question that "his yelling, his crying, his demanding" was what she liked least about her son.

The hostility in Elena's representation of her relationship with her child is evident throughout the transcript. Her comment that "He respects me a lot. He knows who he's messing with. He knows . . ." reveals a representation of their relationship as organized around a punitive power dynamic. While less explicit, a similarly threatening undertone is also revealed in her assertion that "everything I do is for his own good." This closed and hostile caregiving stance is further apparent in the following passage:

Interviewer: "So it's when he's violent in situations [that you feel angry as a parent]. How do you handle your angry feelings?"

Elena: "I don't know. I just look at him and I don't hit him; I just look at him and I put this real mean face. Stop, cut it out, it's done and he'll know."

The latter response received a code for *references to hostile behavior toward child*, which indexes manifestations of specific hostile caregiving impulses or behavior. In the exchange that followed, Elena seemed to also evince almost a pride in her child's awareness of when to abstain from engaging her:

Interviewer: "What kind of effects do your angry feelings have on your child?"

Elena: "Oh, when I'm mad, he knows: do not bother me. He'll just try and keep his distance because he knows he's done something wrong."

Notably, Elena does not actually address any potential effects of her angry feelings on her son, and instead focuses on his behavioral adaptations to his mother's hostility. Elena's lack of reflection regarding her relationship with her son is also apparent in her difficulty selecting three adjectives that reflect their relationship and in the generally abrupt, concrete quality that characterized the preponderance of her answers. Indeed, the constricted nature of this protocol accords with the tendency of individuals classified as "Hostile" to demonstrate significant impairments in the capacity to consider their own or other's mental worlds, and their inclination to rely on simplistic explanations of behavior.

Though this constricted quality extended to her descriptions of past and present relationships with her own caregivers, which remained relatively vague, Elena's transcript provided a striking exemplar of the intergenerational transmission of role confusion. When asked to describe her childhood relationship with her father, she reported, "My dad was my best friend; he's like a little brother to me or a big brother." Subsequently, at the end of the interview, when asked to think about the relationship she and her child will have when her child is an adult, Elena responded, "I think that's going to be a great relationship. Instead of mother and son, it will be like brother or sister or best friends." These comments received codes for *role confusion with caregiver* and *role confusion with child*, respectively, as the nature of the described and desired dynamics manifested a peer-like or more frankly role-reversed quality.

Elena's narrative reflected a general dismissiveness around the notion that her parents' caregiving may have affected her and influenced her approach to parenting her child. *Denial of vulnerability* was evident throughout the transcript; it was apparent, for example, in Elena's assertion that she "never feel[s] guilty as a parent." The dismissing quality of her representation of her importance as a caregiver and her child's experience is perhaps best exemplified by the following passage:

Interviewer: "Do you think there are experiences in your child's life that have been a setback for him?"

Elena: "Not really, not yet. I think he's too small for that kind of thing yet." Interviewer: "Okay, he's a 2-year-old already and you're a pretty experienced parent after 2 years. If you had the experience to do all over again, what would you change?" Elena: "I wouldn't change nothing."

Interviewer: "So you wouldn't change anything?"

Elena: "No, not at all. A child's a child."

In these exchanges, Elena uses a physical descriptor ("small") to describe her perception that her child is developmentally precluded from having experienced a setback. Her disavowal of

vulnerability and inability to reflect on her caregiving in the above comments were congruent with her curt, negative responses to the interviewer's other queries as to whether she thinks her child ever feels rejected and whether her child ever has moods or feelings that she doesn't understand. Her minimal curiosity and reflection regarding her son's mental states, and more broadly, distinctly dismissing stance regarding the developmental importance of negative experiences of receiving care, is reflected in her statement that "a child's a child."

Elena also tended to make contradictory statements about herself as a caregiver, her child as the recipient of her care, and her own caregivers over the course of the transcript, with little apparent awareness of the need to reconcile these discrepancies or effort to do so. Evidence of contradictory contents regarding Elena's representation of herself as a caregiver are apparent in the following exchange:

Interviewer: "How has having a child changed you?"

Elena: "It hasn't really changed me much. What really changed me was being responsible and really just trying to keep my head up high for my son. I don't want him to see me down."

Strikingly contradictory statements of fact were also evident in Elena's descriptions of her life with her child:

Interviewer: "I'd like you to think of a time when you and your child weren't together, when you were separated. Can you describe that to me?"

Elena: "We are never separated. My child is always with me."

Interviewer: "Okay, so what about when he goes over to his dad's?"

Elena: "I feel like he's still with me, because I still have toys to clean up half the time." Notably, the resolution of this contradiction, prompted by the interviewer's reference to Elena's comments earlier in the interview, is marred by an undertone of exasperation or resentment regarding her caregiving role.

Though notably constricted and predominantly characterized by hostile features, Elena's narrative also contained subtle helpless features that warranted its classification as "Mixed Hostile/Helpless." Indirect references to her sense of helplessness as a caregiver were revealed in her comment that she "understand[s] him more when he's sick" as "he demands, not too much, a little bit when he's not feeling good," and her identification of "when he was in the hospital" as a time they really clicked. These comments betrayed Elena's experience of her son's typical needs and demands as overwhelming. Subtle indicators of Elena's sense of helplessness as a caregiver were also apparent in her aforementioned comments regarding his bedtime story demands and her general identification of dislike for "his yelling, his crying, his demanding," though these comments were conveyed with exasperation and frustration rather than a more passive helplessness.

Worryingly for Elena's son, review of SSP data following interview analysis revealed that Elena's child had been classified as disorganized at 12 months, with a disorganization score of 6. Evidence of his aggressiveness and controlling-punitive behaviors within their contentious relationship portended a developmental trajectory at clinical risk for externalizing problems, including oppositional defiant disorder and conduct disorder diagnoses (Fearon et al., 2010; Guttmann-Steinmetz & Crowell, 2006; Lyons-Ruth, 1996).

Sadie: Mixed Hostile/Helpless Narrative

In contrast to Elena's narrative, Sadie's "Mixed" protocol is characterized by a preponderance of helpless rather than hostile features. Sadie was 22 years old and her son was 13 months at the time of her interview; the two of them were living with her mother and her three

adolescent sisters. Sadie described her son's father, who urged her to get an abortion and initially denied the son was his, as a significant source of current stress; he was paying child support at the time but had recently threatened court action to seek joint custody. Sadie also referred to a difficult birthing experience, marked by an extended separation from her son immediately following his delivery by emergency Caesarian section and the presence of anxious and paranoid thoughts in the following days.

Sadie's narrative was characterized overall by a notably adolescent quality and relatively low psychological-mindedness. She referred to her mother in the transcript as "Mommy" and, when asked to consider her relationship with her son in the future, identified not embarrassing him in front of his peers as a way in which she'd approach their relationship as he got older:

"If I have to say something to him when the friends are there, well, maybe I will wait for them to leave, or pull him away from them for a little bit and speak to him alone, not make a scene in front of them. But doing it calm and not like wacky or screaming in front of your friends, you know. I know he's going to get embarrassed like I did. So things like that, I wouldn't do them. Of course, I've been through it. So I wouldn't do those things. I will take it between him and me, so that his friends don't find out."

Sadie's relative developmental immaturity also seemed apparent in her description of her son's normative developmental moods and needs as "personalities," as in her assertion that he had "good and bad sides – both personalities." Her characterizations of her son also appeared to be based on recent, discrete experiences, as opposed to on any more encompassing consideration of or reflectiveness regarding his qualities. When first asked to describe her son in the interview, Sadie attributed his physical characteristics to herself and challenging temperamental characteristics to her mother and his father: "Well, the temper, in that part he looks like my

mother and his father. He got like half and half. And in the face, in how he looks, he looks like me." She references his temper subsequently, again contextualizing this quality as an attribute of her mother's:

Sadie: "But I don't like his temper. It's my mom's temper."

Interviewer: "It's your mom's temper?"

Sadie: "Yeah, he's got the same temper as my mother."

These overlapping representations of her mother and her son received the code for *global devaluation*, in keeping with the protocol established in the original AAI manual for such references to someone's "bad temper."

Notably, despite these nondescript references to her "temper," Sadie's mother seemed to be highly involved as a caregiver for both Sadie and Sadie's child, particularly early in the transcript. Sadie noted that her son's favorite things to do included "talk[ing] to his grandmother" and that when her mother returns home while he's napping, "he hears my mom's mouth; he's like, 'Grandma's here; forget about the sleeping, that's for later!' He grabs her, he kisses her, he be like, 'Oh, it's been a year since I've seen you!'" Sadie also described her son calling her by her first name, commenting, "I'm like, 'Don't call me Sadie, I'm Mommy.' And when he knows that he's in trouble, that's when he calls me Mommy, but most of the time it's only Sadie."

The coder's initial impression that Sadie's mother was assuming a dual-generational caregiving role was countered later in the transcript, when Sadie described her own caregiving role with respect to her mother's health concerns. Strikingly, Sadie's response to the interviewer's questions about her own needs for care in this exchange revolved around her perceived need to take care of her mother, and the passage thus received a *role confusion with*

Interviewer: "Do you ever feel like you need someone to take care of you?" Sadie: "No. But now I'm 22 and I have a son and I'm still living with my mother. I'm like, 'Oh yeah, for how long am I going to be living with her?' Sometimes I wonder. And she's like, 'You're not leaving me.' I don't have a rush to leave, but there's going to be a point when I want to have my own place. And she's like, 'Oh, no!' So in a way I haven't moved forward, maybe because I don't want to leave her alone. She's inside the entire day, alone. And she's sick. She takes a lot of pills. She's got anxiety, depression, sometimes she gets panic attacks. And so I'm scared to leave her alone, all those hours there with nobody to talk to. What about if she wakes up like she does, depressed? Who's she going to talk to, what is she going to do? I'm like, at least I'm there, I'm watching her like, she's not going to do something dumb. If she needs a pill, I will go and give it to her. Imagine me moving and if something happened. So, no, I don't got reason to leave my house yet."

Despite her apparent preoccupation with her mother's needs over her own, Sadie also appeared to express a desire to defer her parental role to her own mother and demonstrated a particular difficulty with tolerating her son's distress. Describing the experience of taking her son for his annual pediatric exam, where he was due for three vaccines, she recounted:

"And I'm – I'm alone, I got the baby. They're going to shoot him, and I don't like that; it hurts. I'm like, imagining him. I'm like, 'Oh, it's going to hurt me more than him.' When they did the fingerstick, I was like, 'Don't worry, I know it hurts.' He started screaming, and I'm like, 'You haven't felt nothing yet. If there's three more to come, I don't know how I'm going to handle it. They're going to hurt me more than you because I don't like to see you like this.' So he came and gave me a hug. I was thinking like, 'Oh my god, remember when they gave me the shots.' And when the nurse came in to do the three and he starts screaming, oh my god, it felt like they were putting the vaccines to me. I told my mom, 'Next time you're coming with me because when they're going to do the shots, you're going to go in. I'm going to stay out because I can't see him like that.'"

This passage received codes for both *helpless/abdicating caregiving stance* and *references to fearful affect*. In a similar instance, Sadie conveyed marked ambivalence regarding her approach to discipline, adopted from her own mother, and a wish to abdicate from the role:

"I feel guilty because I scream or take things away from him, and the way he acts, and me screaming, I feel kind of bad. I'm like, 'Mommy, you handle him. I don't feel good. I feel bad.' She's like, 'Me too, when I used to scream at you. But see, now you're nice, so that's what you got to do with him.' I'm like, 'Yeah.'"

Interestingly, in this passage, Sadie expressed awareness of her discomfort with her caregiving behavior and dissonance regarding the guilt it engendered, but nonetheless remained identified with her mother's strategy.

Both Sadie's mother and her child seemed to have assumed some responsibility for the regulation of Sadie's affects, as evidenced by the above excerpts as well as her description of her child's responses to her anger:

"He kept looking to the floor, like, 'I did that? That's why Mommy's mad,' like looking around like, 'Who else is she mad at?' And he's looking around and he don't see nobody. 'Well, I've got two choices, like keep being bad, or try to calm her down.' And he comes and starts throwing kisses and he knows that's my weak side, and I start laughing when he starts kissing me because he looks funny. And he knows with those faces that I'll laugh."

Sadie's perception of her son's responsibility for regulating her moods marked a pronounced instance of *role confusion with child*.

Her seeming reliance upon her family members for regulation may have been a corollary of her broad sense of helplessness in the caregiving role. Describing her exasperation, exhaustion, and ambivalence with her son's needs for attention, Sadie commented:

"Sometimes I compare it to when I didn't have him. I would be out still, walking around with my friends. Now I'm frustrated, I don't even want to watch TV, my body hurts, I just want to go to sleep and I can't. It's hard, and sometimes when I'm feeling like that he goes to bed late. And I have to find energy where I don't have it, to play with him and make him feel comfortable for him not to cry or nothing. I'm like, 'Oh, Mommy, how you do it? With pills or what?""

Her sense of being overwhelmed and inclination to seek guidance from her mother is apparent at other points in the transcript, including in her similar comment: "Before I didn't believe her that it was so hard, but now that I'm a single parent like she was, I'm like, 'I don't how could you do it, because I'm going nuts. How you did you do it?" Sadie also revealed helplessness in her representation of herself as a caregiver when describing how she felt when she and her son click:

"Oh, I feel good, I'm like, 'Yay! I didn't scream at you today, I didn't put you in time out, I didn't take nothing away from you. It's just wonderful, you didn't get mad, you let me do everything, and you didn't even bother me. . . . That's wonderful.' And when he sleeps, I'm like, 'Oh, thank the lord. He's sleeping, I can do everything without being like, where's he at?""

In this passage, Sadie's palpable joy and relief regarding occasions when her son is quiet, self-

sufficient, or sleeping is indicative of her typical experience of being overwhelmed by the demands of her caregiving role.

Sadie's transcript also evinced a marked exemplar of dissociative processes, which was coded under *helpless/abdicating caregiving stance*:

"Sometimes I don't play with him, and he gets mad. When I'm really thinking, and I'm sitting. Like, I'm there, but my mind is somewhere else. Sometimes he's even talking to me and I don't hear him, and asking me for something, and he gets real mad and starts to throw things, and I wake up like, 'Oh my god, what's he about? I was in the moon, what was I thinking?' I'm like, 'I'm alone with the baby and I'm in the moon thinking about things that I'm not supposed to be thinking right now because I'm watching him.' So, sometimes I feel bad because I just like, flew away. My body's there, but my mind's like, I don't hear nothing."

This excerpt vividly portrays the way in which parental dissociation can impinge upon parental functioning, and in doing so impact interactive exchanges between parent and child. Indeed, prospective longitudinal studies from infancy have indicated that early vulnerability to later dissociative symptomatology is related to dysfunctional patterns of parent–infant affective communication, particularly less conspicuous forms like emotional unavailability, and that chronic impairment in caregiver responsiveness may be more central to the etiology of dissociative symptoms than abusive events per se (Lyons-Ruth, 2003; Ogawa et al., 1997).

Various instances of contradictory contents were also evident in Sadie's transcript; these notably included her comments that her son's attachment needs were "too much," later followed by the assertion that "I'm happy because it's a boy, and they're more attached to you." Sadie also made irreconcilable statements about herself as a caregiver, evident in several references to screaming or wanting to scream early in the transcript in conjunction with her later comment that "I don't scream." In another contradictory statement that received the code for *references to hostile behavior toward child*, Sadie commented, "He drives me sometimes crazy because he starts screaming and the impulse is to hit him, and I'm like, 'Whoa, they're going to think I'm hitting him or something, I'm going to get in trouble.' So I put him in time out because I don't like to hit him, he's still little."

One of the most striking elements of Sadie's protocol appeared at the very end, in the following exchange:

Interviewer: "Is there anything else that you want to say that I haven't asked?" Sadie: "Mm, no. I know that he's always going to respect me in the way that, yeah, he will get mad at me, but he won't get violent like other kids. And the way he is now, yeah, he will get mad and mumble, but he won't raise his hand to me, I just know in the way he's acting now – I just hope he will continue like that. But I know that when he grows up, maybe he will get mad and go to his room, and then talk to me, but raise a hand, actually, I don't think – because I don't – never in my life did that to my mom, or would do it."

This unexpected response revealed Sadie's fearfulness of her child as he grows, and conveyed her fragmented or partial awareness of that fear, indicating unresolved trauma and primitive defenses. Her response provides further indication of her proclivity to dissociate, or mentally segregate, trauma-related affects that are too threatening and disorganizing for her to experience. These unintegrated contents nonetheless remain mentally active and find intermittent expression in her discourse and behavior. To the extent that Sadie's continuing state of fearfulness impedes her ability to "engage in an 'integrated enough' affective, symbolic, and interactive dialogue" (Lyons-Ruth, 2007, p. 612) with her son, the interactional and behavioral concomitants of that fear are liable to link her unresolved trauma to his own developing capacity for the adaptive regulation of stressful arousal.

Importantly, Sadie's narrative suggested that she was making important progress towards resolving her feelings regarding her trauma, her difficult pregnancy, and her relationship with her child's father, as well as her broader ambivalence regarding her current situation. Asked how she handles her angry feelings, Sadie replied, "I just go weekly, once a week, to my psychologist and talk to her." Sadie was also able to identify how her angry feelings affect her son:

"When I get like that, I just go for a walk, to the store, or take a long bath. And when I come out I try not to be sad because he can feel it. And he kind of knows when I'm not feeling that happy or I'm sad. He just wants to be with me and that's it. And I don't want him to feel like that or feel sad."

Sadie's son had been classified in the SSP a year prior as insecure-resistant, with a low disorganization score of 2, indicating that her child was able to develop an organized strategy for communicating his attachment needs. It's conceivable that continued intervention would further mitigate Sadie's HH caregiving representations and promote her ability to provide a secure caregiving milieu for her child.

Mia: Mitigated Hostile Narrative

Mia was 20 years old with a 15-month-old daughter at the time of her parenting interview, and had just moved in with her boyfriend after having lived with her father and two brothers. Mia described her daughter's father as someone who "was supposedly going to help me, and then he left me by myself" and was "no longer in the picture." It was apparent from Mia's derisive account, represented in globally contemptuous terms, that this had been a volatile relationship. Mia's transcript also revealed an extensive childhood trauma history, including sexual abuse by a relative, physical abuse by her mother, and abandonment by her father, in addition to exposure to domestic violence and parental substance abuse.

Mia expressed markedly hostile attachment representations, and her preoccupation with her own negative experiences of receiving care was evident throughout the narrative. Mia's transcript evinced intense derogation toward globally devalued parents, who were represented as malevolent and larger than life. This was evident in her devaluation of her relationship with her mother as "hurtful, painful, horrible," as well as other comments made in reference to her mother, such as "(laughs) bitch" and "I hate her ass." Comments such as these received the code for *global devaluation*.

The segregated nature of Mia's representations of her father was apparent in her alternating, unreconciled positive and negative representations of him and their relationship. The unresolved fearful qualities of Mia's representations of her father were particularly notable for their continued childlike perspective: "You just see my dad and you're scared of him He's just a gruff person, and he always has this mean, mean face. I was always scared of him." Yet Mia was clearly also idealizing of her father and demonstrated an *identification with a hostile caregiver*, as evidenced in her comment that "What he says goes and that's it. And that's the way I am like."

Mia's identification with her mother, another hostile attachment figure, was apparent in her *denial of abuse* in the following assertion: "Whatever she had she would beat me. But I – but that's – I don't know. I still do – I felt I got hit because I did something wrong. Not just because she wanted to hit me." Though Mia's denial of the impact and severity of her experiences can be viewed as an effort to preserve the relationship by internalizing the rationalizations of an abusive

caregiver, the ongoing nature of the denial in adulthood reveals Mia's lack of psychological differentiation from her mother. Instances of *denial of abuse* can be suggestive of an inherently contradictory state of mind, as it is typically detected when a subject has denied abuse of self but elsewhere in the transcript described clearly abusive behaviors on the part of the caregiver (Lyons-Ruth et al., 1995-2005).

Mia's conflict regarding her attachments to her parents was also evident in her shifts between grouping and ungrouping her parents together, without meta-cognitive comment, as shown in the following exchange:

Mia: "Now I know I'll be ten times better than them. I have to be. It's not that I want to be, I have to be. I don't want my daughter to hate me the way I hate her." Interviewer: "Hate your mom."

Mia: "I gotta be better than them."

These comments simultaneously revealed Mia's representation of her mother marked by *global devaluation* and her desire to have a better relationship with her own daughter. Despite her clearly unresolved and unintegrated representations of her parents, it is notable that Mia expressed a strong desire to provide care differently from her parents.

Indeed, Mia's hostility was directed primarily toward her own caregivers, with her representations of herself as a caregiver and the caregiving role being modestly less hostile, and her representations of her child and their relationship being markedly less so. Commenting on her relatively new self-imposed curfew as a parent, Mia contended, "I hate it. (laughs) I hate it, I hate it, I hate it." Thus, while Mia's feelings of hatred or bitterness were directed primarily towards her own parents, she also evinced some hostility in her descriptions of the caregiving role. Likewise, with respect to Mia's representations of herself as a caregiver specifically, her description of herself as a parent was illuminative: "Calm. Nice, sometimes. (laughs) Frustrated, almost all the time." In this response, Mia demonstrated a basic capacity to reflect on her parenting experience and enough openness to acknowledge her ambivalence and short-comings. The hostile elements of Mia's representations of self-as-caregiver were contextualized within broader evidence of a historically hostile representation of self, which provided further evidence for this classification:

Interviewer: "Are there times when things [your daughter] does really make you mad? How do you handle those feelings when you really get mad?"

Mia: "I walk away. 'Cause, before I found out I was pregnant with my daughter, I was the type of person that didn't take shit from anybody. . . . If you said something – (slaps) – I wouldn't even think about it twice. I was that type of person – you'd get your ass beat, you know what I mean? And I had to calm it down; I hated calming it down, 'cause I was like, that's not the person I am. I can't see myself being calm, and being a mom, and you know, taking her to the park – you know, to me that wasn't me. I had to learn to calm down, so now whenever she does something wrong, I just walk away, 'cause I don't want to do something stupid."

This description revealed Mia's inclination towards angry, retaliatory acts. Such indicators of a history of coercive or punitive behavior provided evidence that Mia regularly engaged in forms of reciprocal relational aggression.

Mia also appeared markedly defended against vulnerability, frequently resorting to harsh *laughter at pain* and assuming a darkly humorous stance toward anecdotes about painful experiences related to giving and receiving care. While her transcript demonstrated a preponderance of *indicators of an invulnerable stance*, Mia also exhibited a few moments of

vulnerability, as captured by the following exchange:

Interviewer: "Do you ever feel like you need somebody to take care of you?" Mia: "Yeah, I wish I was a little girl all over again. Didn't have the childhood I did, but somebody taking care of me. (laughs)"

Interviewer: "When do you notice you feel that way the most?"

Mia: "When I watch her sleep. I try to think how it was when I was that little." Despite being marked by an instance of *laughter at pain*, this exchange nonetheless illustrated

Mia's capacity to recognize and tolerate her own vulnerability.

Furthermore, in marked contrast to her representations of her caregivers described above, Mia described her daughter in the following way: "Everything I don't see in myself, she has. . . . Sometimes just for nothing, she'll walk up to me and hug me so tight in my neck; it feels so good. 'Cause, I don't know, I never had that when I was little." Mia's narrative also provided striking evidence that this positive representation of her daughter marked a shift in her representational stance toward caregiving and her child since her pregnancy:

Mia: "When I was pregnant with her, I was drinking a lot. I didn't want her. I went through – I don't know what. I was stressed. I didn't want her. And now I think about it, and I'm like, 'How did you do that?""

Interviewer: "And that was before she was born. What about now that she's born – are there any times as a parent that you feel guilty?"

Mia: "Because if something were to happen to her, it would've been my fault. I wasn't thinking about her. I was thinking about myself."

Interviewer: "And how do you handle those feelings, when you feel guilty?"

Mia: "Just thank god that she came out okay. And she's a bundle of joy. (laughs) An

energetic bundle of joy! (laughs)"

This passage revealed a remarkable shift in Mia's representations from a profoundly hostile stance ("I didn't want her") that was manifest in destructive behavior, to a distinctively effusive view ("she's a bundle of joy").

Furthermore, the subsequent exchange between Mia and the interviewer sheds light on Mia's consideration of her daughter's developmental capacities and her attempts to grapple with conflicting caregiving inclinations:

Interviewer: "When you do have angry feelings, what kind of effect do you think they might have on her?"

Mia: "She probably doesn't understand why she's getting me mad. . . . But, you know, you can't compare your capacity to hers; she doesn't understand what she's doing wrong. She understands the word 'no,' but she doesn't understand why you're saying 'no.' So I try to, you know, give excuses not to spank her. I don't like spanking her."

Thus, Mia's narrative did reveal some capacity for relatively more nuanced and differentiated representations, an ability to tolerate and reflect on some vulnerable feelings, and an explicit desire to have a different caregiving relationship with her daughter. These moments were not, however, integrated with the rest of her discourse, which often read like a string of trauma-related anecdotes that revealed minimal reflection and intermittently heightened angry affect. As a whole, her narrative was marked by a preponderance of rage, resentment, and unresolved fear. Her transcript evidenced a clear constellation of "Hostile" phenomena, including contradictory and unintegrated mental contents, intense affectivity with little reflection, and derogating representations of herself as a caregiver and most particularly of her caregivers, in the context of clear past and ongoing hostile relational patterns.

Remarkably, Mia's daughter was classified as secure in the SSP at 12 months. Her daughter's secure attachment is surprising, given Mia's clear HH features, and suggests that her positive representations specific to her child and their relationship may have provided a protective buffering effect within the caregiving system. It is particularly notable that the shift in Mia's representations of her child from her pregnancy to the time of her parenting interview coincided with Mia's participation in the MTB intervention. This raises the prospect that intensive intervention during this pivotal period of parental development may be capable of mitigating the influence of HH representations on parents' emergent caregiving systems.

CHAPTER FIVE: DISCUSSION

Summary

The central goal of this project was to explore the manifestation of Hostile/Helpless (HH) states of mind in parenting narratives and arrive at a preliminary adaptation of a coding manual for use with the Parent Development Interview. The adapted instrument assesses the caregiving system as it has developed and is evolving in vivo, emphasizing caregivers' representations of both the child and the self as a caregiver. It is apparent from existing literature that HH mental states are pertinent to understanding processes involved in the intergenerational persistence of trauma, attachment disorganization, and child maltreatment (Barone & Frigerio, 2009; Finger, 2006; Frigerio et al., 2013; Lyons-Ruth, Yellin, et al., 2003, 2005; Melnick et al., 2008; Milot et al., 2014; Terry et al., 2020). The ability to identify HH mental states in parents' caregiving narratives should further our understanding of these processes by enabling their detection in the context of an interview that directly pertains to the current caregiver–child relationship.

Current systems for evaluating parenting narratives are limited in their capacity to detect the pervasively unintegrated and contradictory mental states that characterize HH representations. While existing systems have been associated with important factors such as maternal sensitivity and child attachment security, they are less suited to detecting the pervasive representational features that underlie the highest-risk attachment relationships. Among systems that have identified representational features associated with disorganized attachment (Crawford & Benoit, 2009; Solomon & George, 2011), categorical classification may constrain clinical utility. Continuous, dimensional conceptualizations may be more useful for analyzing representations in high-risk populations and informing clinical intervention (see BakermansKranenburg & van IJzendoorn, 2009; Fraley & Spieker, 2003; Isosävi et al., 2016; Slade, 2004).

By capturing the aggressive, impoverished, and incoherent qualities of severely disturbed representations, the scaled HH system for the AAI has markedly advanced researchers' ability to predict clinically meaningful outcomes in parents and their children (Finger et al., 2015; Lyons-Ruth et al., 2003, 2004, 2016; Lyons-Ruth, Yellin, et al., 2005; Melnick et al., 2008). However, the AAI is not designed to capture features of the caregiving system, which may have particular relevance to research and clinical practice with vulnerable caregiver–infant dyads. Indeed, several features identified within this sample appeared to be specifically relevant to the presentation of HH phenomena within the current parent–child relationship, and were thus integrated into the repertoire of HH PDI codes.

Theoretically, representational models are continually recreated through the synthesis of existing categories and new experiences; these "synthesized models are a characteristic of the present and not stored in memory; rather, their *effects* are incorporated as potentials for influencing renewed models in future experiences" (George & West, 2012, p. 22). As such, while the assessment of a caregiver's representations of her own childhood attachment experiences is likely to share important qualitative similarities with her representations of her child and experience of the caregiving role, there is also the potential for these representations to be importantly distinct, as a corollary of the caregiver's reworking of her mental models in light of experiences with her child (Solomon & George, 2006). Thus, the specific capacity to detect HH features as they relate to the caregiving system takes into consideration the potential for the transformation of caregiving representations during the transition to parenthood.

Elena, Sadie, and Mia

A closer examination of the parenting narratives of three mothers was intended to

elucidate the quality of caregiving representations among mothers classified as HH, with a particular emphasis on the features that characterize and distinguish HH caregiving narratives. As evidenced by these narratives, individuals with HH classifications struggle to bring contradictions in past or current attachment experiences to conscious awareness, with the result being that those experiences are not meaningfully reflected upon and integrated over time. As a consequence, HH PDI narratives are characterized by ineffective efforts to cope with activated attachment- and trauma-related affects that continue to be overwhelming because they have not been processed. In varied forms and degrees, Elena, Sadie, and Mia all described extreme behavioral reactions or perceptions of helplessness, evinced constriction around certain attachment-related experiences and affects, and revealed difficulty reflecting upon their own behavior or that of their child.

While Elena's narrative conveyed a primarily constricted, punitive tone and Sadie's revealed a more helpless and less differentiated quality, both representational positions violate the adaptive functioning of the caregiving system. The functioning of the caregiving system rests upon the premise that as a caregiver makes the transition from a predominant focus on the fulfillment of her own attachment needs to those of her child, her experience of receiving care will inform her ability to provide care for her child. If a caregiver's childhood needs for protection and comfort when fearfully aroused or distressed were not adequately met, then her infant's pain, distress, or fear are liable to evoke her own physiological arousal, painful memories, and negative emotion related to re-experiencing early vulnerability and lack of safety. The caregiver's resulting need to avoid activating her own unintegrated memories and affects and protect herself from her own earlier experiences of fear and helplessness manifests on a behavioral and interactional level in hostility and constriction, as in Elena's case, or in

helplessness and withdrawal, as in Sadie's case.

It is noteworthy that Elena overtly described hostile impulses or actions toward her child during her interview, as did other mothers in this sample. The tendency to discuss one's parenting in socially desirable ways in assessment contexts suggests that caregivers may refrain from expressing hostile feelings or intentions towards their children during interviews (Bornstein et al., 2015). This may be particularly the case for caregivers who are concerned about the prospective involvement of child protective services. It is conceivable that the effective activation of the caregiving and attachment systems by the PDI may provoke references to angry or aggressive impulses toward the child from the caregiver that may otherwise be inhibited, and in doing so, permit for the detection of risk for maltreatment.

The analyses of the two mothers enrolled in the MTB intervention, Sadie and Mia, revealed both a moderately worrisome and a moderately positive outcome. Sadie displayed a mixed pattern that was largely characterized by helpless features and appeared to be in part the result of a long-term caregiving adaptation, which took the form of careful attention to her mother's moods and needs at the expense of having her own attachment needs met. Sadie described herself as easily overwhelmed by her child's needs and seemed frequently caught between seeking resolution for her own unattended attachment needs and tending to those of her child. This underlying conflict may contribute to the expression of contradictory caregiving behaviors which become internalized by the child as contradictory and unintegrated models of the caregiver and the caregiver–infant relationship (Lyons-Ruth et al., 2004). Relatedly, Sadie's narrative was marked by multiple instances of role confusion in both her relationship with her mother and with her son. This was evident in varying degrees to which Sadie abdicated responsibility for her own affect regulation while her son assumed responsibility across the dyad, with a similarly role-reversed process being reflected in her dynamic with her mother.

Sadie's interview was also particularly striking for its representation of dissociative phenomena and for her abrupt expression of fearfulness at the close of the interview. Both instances suggest that Sadie's proclivity to mentally segregate intolerable affects, which find intermittent expression in her discourse and behavior, might interfere with her ability to acknowledge and respond to basic attachment needs within herself and her child. Nonetheless, Sadie appeared able to consider alternate perspectives, engage in finding shared meaning with the interviewer, and invest in her own therapy. The ongoing support and therapeutic work may have served as protective factors for her son, who was otherwise exposed to many risk factors associated with the development of disorganized attachment.

One of the most noteworthy findings from these analyses was in the pronounced discrepancy between Mia's representations of her caregivers and those of her child. Despite *global devaluation* of both caregivers, pervasive instances of *laughter at pain*, and numerous other indicators of a hostile relational pattern throughout the transcript, Mia's representations of her child seemed to be safeguarded exceptions. Her daughter's secure attachment status accords with findings from a small sample showing that mothers with unresolved trauma and insecure attachment patterns had securely attached infants if the mother was "reorganizing" toward secure attachment (Iyengar et al., 2014). In that study, mothers' mere engagement in the reorganizational process appeared to be enough to mitigate the intergenerational outcome and allow the mother to better attune to the infant's cues (Iyengar et al., 2014). Mia's participation in the MTB intervention likely aided this kind of transformative process and, in doing so, enabled her to engage more fully with and attend more sensitively to her daughter's cues.

Mia's divergent representations, particularly when paired with her daughter's secure

attachment status, underscores the importance of the capacity to detect HH features within the caregiving system as well as within the attachment system. Likewise, the transformation in Mia's representation of her child from pregnancy to the time of the interview is notable, both within and without the context of the continuing hostility that characterizes her representations of her parents. These observations again suggest that intensive intervention across the prenatal and postnatal periods may protect against disorganized attachment outcomes in the child, despite the presence of HH representations in the parent.

Study Limitations

This study has several limitations. The sample was notably small, and characterized by young maternal age and high sociodemographic risk. Both of these factors may have contributed to the particular manifestation of HH features in the transcripts. Additionally, the sample was not inclusive of the breadth of primary caregiving relationships, which can include fathers, grandparents, other relatives, and non-kin caregivers. Future research should examine the generalizability of the observed HH features in this sample to the array of forms and contexts of primary caregiving relationships. Finally, the majority of the sample was enrolled in the control group (n = 16), as opposed to the intervention group (n = 4), limiting the potential for between-group comparison. Given these limitations, ongoing revision of the preliminary manual will be informed by analyses of additional interviews drawn from multiple samples.

Some specific manifestations of HH features of caregiving representations observed in this sample are also likely to be constrained to the developmental period of toddlerhood. Given the varied challenges associated with parenting an infant, toddler, school-age child, and adolescent, there may be an evolution of typical features of HH caregiving representations that accord with the specific ways in which the child's developmental period may activate the caregiver's untenable fear and segregated affects. In fact, an initial challenge to identifying HH discourse within this sample was differentiating between normative versus pathological caregiving helplessness, as the parental perception of powerlessness in the face of a newly willful, and perhaps defiant, toddler is common and indeed expectable. As such, manifestations of HH caregiving representations should always be evaluated within the context of the child's developmental stage.

Neurobiological Considerations

The transition to motherhood is characterized by dynamic neurobiological and hormonal changes that support the establishment and maintenance of maternal caregiving behaviors (Kim et al., 2010, 2016; Swain et al., 2014). Neuroimaging studies have demonstrated that the maternal brain undergoes significant structural changes during pregnancy and the postpartum period. Increases in gray matter volume of brain areas associated with motivation and reward processing, sensory processing, empathy, and emotion regulation have been documented across the initial postpartum months, and linked to the expression of maternal behaviors and mothers' positive perceptions of their infants (Feldman, 2015; Kim et al., 2010; Slade & Sadler, 2018).

The presence of unresolved trauma and unintegrated affects, as well as the observable impacts of such on a mother's caregiving behaviors, are liable to affect and be affected by structural alterations and aberrant functional pathways of responding at the neurobiological level. Mothers classified as having unresolved trauma have been shown to display reduced amygdala activation in response to seeing their own infants in distress, an effect that was not observed when these mothers viewed the distressed faces of unknown infants (Kim et al., 2014). Blunted responding may reflect traumatized mothers' dissociation from their infant's distress, with the attendant implications for the intergenerational transmission of trauma. This neural indication of

maternal disengagement may represent part of a process linking maternal unresolved trauma to disrupted caregiving, lending further support for the notion that clinical work with traumatized mothers should focus on supporting their capacity to tolerate a broad range of affects and maintain engagement during moments of infant distress.

Neuroscientific research also provides accumulating evidence for the idea that the first 2 years of a child's life may be a sensitive period during which clinical intervention could preempt long-term consequences of early attachment disturbance. Recent imaging work has shown an association between both maternal and infant components of disorganized attachment interactions at 18 months of age and increased left amygdala volume, which was in turn associated with dissociative symptoms, in young adulthood (Lyons-Ruth et al., 2016). Left amygdala volume also mediated the prediction from attachment disturbance in infancy to limbic irritability in adulthood, suggesting that disorganized attachment relationships may impact later adaptation by instigating increased volume in the left amygdala that contributes to increased irritability in limbic pathways. This relationship was not explained by other risk factors in infancy, childhood, or adolescence. These findings accord with evidence that the human amygdala develops rapidly during the first 2 years of life and evidence from animal models that early stress-related dendritic growth in the amygdala may be resistant to change (Cohen et al., 2013; Vyas et al., 2004, 2006). Such structural impact and associated long-term sequelae support the argument that clinical intervention in the first years of life could have particularly important consequences for later outcomes in childhood and adulthood.

Clinical Implications

The psychic upheaval that characterizes the perinatal and postnatal period in women proffers a unique opportunity for early intervention services. Because the caregiving system is actively forming and most malleable to reconstruction as the expectant and new mother develops representations of her child and herself as a caregiver, intervention with vulnerable mother– infant dyads during this period may allow for the positive modification of caregiving representations. Representations of the child and of the self as a caregiver are transformed from pregnancy to the postpartum period, as interactions with the child prompt modifications in representations of the imagined child, and representations of the self as a caregiver are progressively differentiated from representations of one's own caregivers. As caregiving representations become more permeable, being influenced by the real child as opposed to the imagined child constructed during pregnancy, clinicians have a unique opportunity to foster positive representational shifts.

While advances in neurobiology, developmental psychology, and developmental psychopathology over the last several decades have contributed to the widespread consensus that early intervention services provide a critical framework for addressing disparities in child outcomes (Shonkoff, 2010; Shonkoff & Levitt, 2010), the realization that support for the caregiving milieu is crucial has seemed to lag relatively behind. From a preventive standpoint, Shonkoff and Fisher (2013) have contended that "substantially better outcomes for vulnerable, young children could be achieved by greater attention to strengthening the resources and capabilities of the adults who care for them" (p. 1635), rather than by continuing to focus predominantly on the provision of child-focused services. Yet until recently, much of the emphasis in early intervention service implementation and evaluation has centered on children's developmental outcomes, a natural corollary of the accumulating evidence that the first years of life are a particularly sensitive and malleable period of development.

It is imperative that early intervention clinicians, and particularly those who treat

traumatized, at-risk caregivers, understand that the transition to and first years of parenthood represent a critical developmental period for parents, as well as their children. This interval reflects both a period of heightened risk as well as a unique window of opportunity to support transformative psychological change. In fact, in clinical work with parents and their young children, Lyons-Ruth and her colleagues (2004) have suggested that "arguably, the parent is the most important patient" (p. 83). Clinical work with the potential to mitigate malevolent and unintegrated representations of important relationships during this period is inherently relational and operates at both the level of the parent–infant relationship and the parent–therapist relationship. In both relationships, attachment needs are activated in the context of vulnerability and the experience of distress.

For a parent struggling with the dynamics of a hostile–helpless relational model, the therapeutic relationship is particularly vulnerable to feelings of power imbalance and polarization (Lyons-Ruth & Spielman, 2004). The clinician has the opportunity to model for the parent forms of relating and interacting that are flexible, balanced, empathetic, and productive. As mothers come to "experience themselves as meaningful in the eyes" of their clinician, that experience "of being held in mind as a coherent, intentional person who is trying to do her best allows mothers to start experiencing themselves and the baby in the same way" (Sadler et al., 2006, p. 278). Eventually, identifying the hostile–helpless internal working model in the therapeutic interaction may permit the emergence of a coherent narrative thread for the parent, one that ties together the past and present in the context of current dynamics and creates space for a new form of relating that is neither hostile nor helpless.

Furthermore, while several researchers have examined caregiving representations prenatally or in the infant's first months of life, the HH system may have particular utility in

assessing caregiving representations in parents of toddlers. Lyons-Ruth and her colleagues (2003) have suggested that the observed increase in disorganization from 12 to 18 months among dyads with maternal exposure to violence or abuse might be a corollary of the prospect that "the infant's increased mobility and agency, including the new capacity to say 'no', may be a particularly potent trigger for the mother's feelings of both helplessness and hostility related to past abuse" (p. 348). This possibility underscores the importance of examining the HH features of caregiving representations in toddlerhood, as the child's developmental milestones may activate or exacerbate maternal HH features that had been undetectable or subtle in pregnancy and the child's first year.

Theoretically, caregivers' representations of their children in toddlerhood may also have unique clinical significance. It is at this stage that children begin to understand that they and others are intentional agents whose actions are caused by prior states of minds, and that their actions can bring about changes in minds and behavior (Fonagy et al., 2002; Fonagy & Target, 1997; Kim, 2015). Caregivers are the first to put words to a child's experience, and they do so long before the child is able to understand such representations. Language invoked in the description of the child reflects a set of meanings that first occur in the caregiver's mind and are progressively negotiated and integrated through interaction with the young child. It is not until the child's second year of life that the actual words of the caregiver become critical to solidifying, and expanding or hindering, his self-experience. From this stage, the language used to define and elaborate representations becomes fundamental to what is known about oneself and others (Gergely et al., 2000).

While the early and effective implementation of proper assessment and treatment for parent–child dyads at acute risk may have the capacity to intervene in the transmission of

disrupted attachment relationships and potentially harmful caregiving, it is also imperative to consider that sociodemographic variables and structural barriers may function as important qualifiers of the potential for early intervention programs to mitigate HH caregiving representations. Meta-analyses have shown that rates of child attachment insecurity and attachment disorganization are impacted by aggregated socioeconomic risk factors (Cyr et al., 2010). These findings provide support for Bernier and Meins' (2008) cumulative risk model, which proposes that a threshold of social risk factors will increase the incidence of attachment disorganization. The mechanisms underlying this association are as yet underexplored, but proximal factors are likely to include stress-related effects on parental behavior (Evans & Kim, 2013; Lyons-Ruth & Jacobvitz, 2016). High levels of sociodemographic risk may thus prove to be an important moderator of intervention effectiveness with parents classified as HH.

Future Directions

Attachment-related instruments are among the best validated assessments of early risk in developmental science. Large-scale studies and meta-analyses have affirmed their relation to concurrent risk factors in infancy as well as their predictive value for behavior problems in childhood and clinical diagnoses in adulthood (Fearon & Belsky, 2011; Fearon et al., 2010; Madigan et al., 2013, 2016; van IJzendoorn et al., 1999). Furthermore, these studies have consistently pointed to disorganized attachment as the form of insecure attachment that portends the greatest risk for later psychopathology. The clear significance of the parent–child attachment relationship underscores the importance of continued work exploring the mechanisms associated with deviations in caregiving relationships that may be particularly fruitful for understanding the intergenerational transmission of maladaptive relating and developmental trajectories toward pathology.

By extending the pivotal work of Lyons-Ruth and her colleagues on HH representations to their specific features in parents' caregiving representations, this exploratory work has unveiled multiple questions and avenues for future research. Application of the adapted system to a larger and more diverse dataset may reveal meaningful associations with infant attachment classification and other aspects of child development. In particular, the identification of HH features in parenting narratives has the potential to serve as a useful marker of risk for disorganized attachment and for concurrent or future child maltreatment. It may also advance the ability to predict long-term, clinically relevant outcomes for children. Additionally, given preliminary case findings indicating that the MTB intervention may protect against attachment disorganization despite mothers' HH classification, the manifestation of HH features in the caregiving narratives of parents that have received early intervention services is an area that particularly warrants further investigation.

Furthermore, the capacity to classify PDI transcripts for HH representations will enable novel research comparisons. The PI and PDI are currently administered by MTB during pregnancy and at 2 years postpartum, respectively, and used to assess reflective functioning (RF). RF is an operationalization of the capacity to mentalize and measures an individual's ability to make sense of their own and others' behavior in light of underlying, intentional mental states (Fonagy et al., 1991; Slade, 2005). Enhancing this capacity is central to the aims of MTB and other attachment-based parenting interventions, as the construct is both theoretically and empirically related to attachment security. Parental RF has been linked to secure mother–infant attachment, to less disrupted affective communication in mother–infant dyads, and to lower rates of disorganized mother–infant attachment (Grienenberger et al., 2005; Sadler et al., 2013; Slade et al., 2005, 2019). In the future, the adapted HH system for the PDI could therefore allow for the comparison between RF and HH scores across time and treatment groups. This research could illuminate whether change in RF is associated with change in HH, and whether higher parental RF may promote infant attachment security in at-risk populations in part through a mitigating influence on HH states of mind.

Conclusion

Iterative and unrepaired disruptions of early affective bonds with a primary caregiver often portend a complex web of deleterious developmental impacts, but the attachment representations that result are especially illuminative of the fundamental interconnection between the attachment relationship and the quality of an individual's state of mind regarding self and other. The child's capacity to create a coherent image of mind evolves from infancy through early childhood in a manner dependent on the experience of being perceived as a mind by a contingently responsive caregiver. In the presence of the caregiver's nonconscious and continual ascriptions of mental states to the child, manifest in her responses to him, the child comes to the conclusion that the caregiver's reactions to him make sense given states of affect, motivation, or belief within himself. These patterned responses are gradually internalized, becoming inner representations that delimit a sense of self and determine access to thoughts, feelings, and memories relevant to giving and receiving care.

Because the child's ability to develop a rudimentary representation of self is a function of the caregiver's capacity to make the depth and breadth of the child's experience real and meaningful, the structure and functioning of the young child's mind is primarily determined by the types of feelings that are recognized and allowed expression within the caregiving relationship (Haft & Slade, 1989). In this light, the significance of the caregiver's own capacity and willingness to engage broadly with emotions and make meaning of her own and her child's

feelings and internal experiences cannot be overstated. The caregiver provides the means for the child coming to know and represent his own experience; thus, the child's sense of subjective reality, as well as his capacity to symbolize, are mediated by the caregiver's own states of mind. Indeed, it seems that "the True Self does not become a living reality except as a result of the mother's repeated success in meeting the infant's spontaneous gesture. . . . It is the infant's gesture . . . that is made real, and the capacity of the infant to use a symbol that is the result" (Winnicott, 1965, p. 145).

REFERENCES

- Aber, J. L., Belsky, J., Slade, A., & Crnic, K. (1999). Stability and change in mothers' representations of their relationship with their toddlers. *Developmental Psychology*, 35(4), 1038-1047.
- Abrams, K. Y., Rifkin, A., & Hesse, E. (2006). Examining the role of parental frightened/frightening subtypes in predicting disorganized attachment within a brief observational procedure. *Development and Psychopathology*, 18(2), 345-361.
- Ainsworth, M. D. S., & Wittig, B. A. (1965). Attachment and exploratory behavior of one-yearolds in a strange situation. In B. M. Foss (ed.), *Determinants of infant behavior* (Vol. 4, pp. 111-136). London, UK: Methuen & Co Ltd.
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Oxford, England: Lawrence Erlbaum.
- Ammaniti, M., Speranza, A. M., Tambelli, R., Muscetta, S., Lucarelli, L., Vismara, L., Odorisio,
 F., & Cimino, S. (2006). A prevention and promotion intervention program in the field of mother–infant relationship. *Infant Mental Health Journal*, 27(1), 70–90.
- Bakermans-Kranenburg, M. J., & van IJzendoorn, M. H. (2009). The first 10,000 Adult Attachment Interviews: Distributions of adult attachment representations in clinical and non-clinical groups. *Attachment & Human Development*, 11(3), 223-263.
- Barone, L., Bramante, A., Lionetti, F., & Pastore, M. (2014). Mothers who murdered their child: An attachment-based study on filicide. *Child Abuse & Neglect, 38*(9), 1468-77.
- Barone, L., & Frigerio, A. (2009). Qualità della disorganizzazione nelle rappresentazioni mentali d'attaccamento delle madri: Uno studio pilota nell'ambito del maltrattamento [Mental

representations of disorganized attachment: A pilot study with abusive mothers]. *Maltrattamento e Abuso all'Infanzia, 11*, 39–50.

- Benoit, D., Zeanah, C. H., Parker, K. C., Nicholson, E., & Coolbear, J. (1997). "Working Model of the Child Interview": Infant clinical status related to maternal perceptions. *Infant Mental Health Journal*, 18(1), 107-121.
- Bernier, A., & Dozier, M. (2003). Bridging the attachment transmission gap: The role of maternal mind-mindedness. *International Journal of Behavioral Development*, 27(4), 355-365.
- Bernier, A., & Meins, E. (2008). A threshold approach to understanding the origins of attachment disorganization. *Developmental Psychology*, 44(4), 969-982.
- Biringen, Z., Matheny, A., Bretherton, I., Renouf, A., & Sherman, M. (2000). Maternal representation of the self as parent: Connections with maternal sensitivity and maternal structuring. *Attachment & Human Development*, 2(2), 218-232.
- Borelli, J. L., St. John, H. K., Cho, E., & Suchman, N. E. (2016). Reflective functioning in parents of school-aged children. *American Journal of Orthopsychiatry*, 86(1), 24-36.
- Bornstein, M. H., Putnick, D. L., Lansford, J. E., Pastorelli, C., Skinner, A. T., Sorbring, E., ... & Al-Hassan, S. M. (2015). Mother and father socially desirable responding in nine countries: Two kinds of agreement and relations to parenting self-reports. *International Journal of Psychology*, 50(3), 174-185.
- Bowlby, J. (1958). The nature of the child's tie to his mother. *International Journal of Psychoanalysis, 39*, 350-373.
- Bowlby, J. (1969). *Attachment and loss: Attachment* (Vol. 1). New York, NY: Basic Books. Bowlby, J. (1973). *Attachment and loss: Separation* (Vol. 2). New York, NY: Basic Books.

Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry*, 52(4), 664-687.

- Bronfman, E., Madigan, S., & Lyons-Ruth, K. (2007). Atypical maternal behavior instrument for assessment and classification (AMBIANCE): Manual for coding disrupted affective communication: Version 2.0. Unpublished manual, Harvard Medical School, Cambridge, MA.
- Bronfman, E., Parsons, E., & Lyons-Ruth, K. (1992). Atypical maternal behavior instrument for assessment and classification (AMBIANCE): Manual for coding disrupted affective communication: Version 1.0. Unpublished manual, Harvard Medical School, Cambridge, MA.
- Byun, S., Brumariu, L. E., & Lyons-Ruth, K. (2016). Disorganized attachment in young adulthood as a partial mediator of relations between severity of childhood abuse and dissociation. *Journal of Trauma & Dissociation*, 17(4), 460-479.
- Carlson, E. A. (1998). A prospective longitudinal study of disorganized/disoriented attachment. *Child Development, 69*, 1107-1128.
- Cassidy, J. (1994). Emotion regulation: Influences of attachment relationships. *Monographs of the Society for Research in Child Development, 59*(2-3), 228-249.
- Cassidy, J. (1999). The nature of the child's ties. In J. Cassidy & P. R. Shaver (Eds.), *Handbook* of attachment: Theory, research, and clinical applications (pp. 3-20). New York, NY: Guilford Press.
- Cassidy, J., & Mohr, J. J. (2001). Unsolvable fear, trauma, and psychopathology: Theory, research, and clinical considerations related to disorganized attachment across the life span. *Clinical Psychology: Science and Practice*, 8(3), 275-298.

- Cohen, M. M., Jing, D., Yang, R. R., Tottenham, N., Lee, F. S., & Casey, B. J. (2013). Early-life stress has persistent effects on amygdala function and development in mice and humans. *Proceedings of the National Academy of Sciences*, 110(45), 18274-18278.
- Crawford, A., & Benoit, D. (2009). Caregivers' disrupted representations of their unborn child predict later infant–caregiver disorganized attachment and disrupted interactions. *Infant Mental Health Journal*, *30*(2), 124-144.
- Evans, G. W., & Kim, P. (2013). Childhood poverty, chronic stress, self-regulation, and coping. *Child Development Perspectives*, 7(1), 43-48.
- Fearon, R. P., Bakermans-Kranenburg, M. J., Van IJzendoorn, M. H., Lapsley, A. M., & Roisman, G. I. (2010). The significance of insecure attachment and disorganization in the development of children's externalizing behavior: A meta-analytic study. *Child Development*, 81(2), 435-456.
- Fearon, R. 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.
- Feldman, R. (2015). The adaptive human parental brain: Implications for children's social development. *Trends in Neurosciences*, *38*(6), 387-399.
- Finger, B. (2006). Exploring the intergenerational transmission of attachment disorganization.Unpublished doctoral dissertation, University of Chicago, Chicago, IL.
- Finger, B., Byun, S., Melnick, S., & Lyons-Ruth, K. (2015). Hostile-helpless states of mind mediate relations between childhood abuse severity and personality disorder features. *Translational Developmental Psychiatry*, 3, 1-11.

Fingerman, K. L., & Yahirun, J. J. (2015). Emerging adulthood in the context of family. In J. J.

Arnett (Ed.), *The oxford handbook of emerging adulthood* (pp. 163-176). New York, NY: Oxford University Press.

- Fonagy, P., Gergely, G., Jurist, E. L., & Target, M. (2002). Affect regulation, mentalization, and the development of the self. New York, NY: Other Press.
- Fonagy, P., Steele, M., Steele, H., Moran, G. S., & Higgitt, A. C. (1991). The capacity for understanding mental states: The reflective self in parent and child and its significance for security of attachment. *Infant Mental Health Journal*, 12(3), 200-218.
- Fonagy, P., & Target, M. (1997). Attachment and reflective function: Their role in selforganization. *Development and Psychopathology*, 9(4), 679-700.
- Fonagy, P., Target, M., Steele, H., & Steele, M. (1998). *Reflective Functioning Manual, Version*5.0, for Application to Adult Attachment Interviews. London, England: University
 College London.
- Forbes, L. M., Evans, E. M., Moran, G., & Pederson, D. R. (2007). Change in atypical maternal behavior predicts change in attachment disorganization from 12 to 24 months in a highrisk sample. *Child Development*, 78(3), 955-971.
- Fraiberg, S. (1980). Clinical studies in infant mental health: The first year of life. New York, NY: Basic Books.
- Fraiberg, S., Adelson, E., & Shapiro, V. (1975). Ghosts in the nursery: A psychoanalytic approach to problems of impaired infant–mother relationships. *Journal of the American Academy of Child Psychiatry*, 14(3), 387-421.
- Fraley, R. C., & Spieker, S. J. (2003). Are infant attachment patterns continuously or categorically distributed? A taxometric analysis of Strange Situation behavior. *Developmental Psychology*, 39(3), 387-404.

- Frigerio, A., Constantino, E., Ceppi, E., & Barone, L. (2013). Adult attachment interviews of women from low-risk, poverty, and maltreatment risk samples: Comparisons between the hostile/helpless and traditional AAI coding systems. *Attachment & Human Development*, 15(4), 424-442.
- George, C., Kaplan, N., & Main, M. (1984, 1988, 1996). *Adult Attachment Interview*. Unpublished manuscript, University of California, Berkeley, CA.
- George, C., & Solomon, J. (1989). Internal working models of caregiving and security of attachment at age six. *Infant Mental Health Journal*, *10*(3), 222-237.
- George, C., & Solomon, J. (1996, 2002, 2008). Caregiving representation rating manual: Rating scales, and Caregiving Interview protocol. Unpublished manuscript, Mills College, Oakland, CA.
- George, C., & Solomon, J. (1996). Representational models of relationships: Links between caregiving and attachment. *Infant Mental Health Journal*, *17*(3), 198-216.
- George, C., & Solomon, J. (2008). The caregiving behavioral system: A behavioral system approach to parenting. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical application* (2nd ed., pp. 833-856). New York, NY: Guilford Press.
- George, C., & West, M. L. (2012). *The Adult Attachment Projective Picture System: Attachment theory and assessment in adults*. New York, NY: Guilford Press.
- Gergely, G., Alvarez, A., Mayes, L., Bach, S., Slade, A., & Ellman, C. (2000). Panel 2:
 Development and the self. *Journal of Infant, Child, and Adolescent Psychotherapy*, 1(3), 25-49.

Granic, I., Dishion, T. J., & Hollenstein, T. (2003). The family ecology of adolescence: A

dynamic systems perspective on normative development. In G. R. Adams & M. D. Berzonsky (Eds.), *Blackwell handbook of adolescence* (pp. 60-91). Hoboken, NJ: John Wiley & Sons, Inc.

- Grienenberger, J., Kelly, K., & Slade, A. (2005). Maternal reflective functioning, mother–infant affective communication, and infant attachment: Exploring the link between mental states and observed caregiving behavior in the intergenerational transmission of attachment. *Attachment & Human Development*, 7(3), 299-311.
- Guttmann-Steinmetz, S., & Crowell, J. A. (2006). Attachment and externalizing disorders: A developmental psychopathology perspective. *Journal of the American Academy of Child* & Adolescent Psychiatry, 45(4), 440-451.
- Haft, W. L., & Slade, A. (1989). Affect attunement and maternal attachment: A pilot study. *Infant Mental Health Journal*, *10*(3), 157-172.
- Hesse, E. (1996). Discourse, memory, and the Adult Attachment Interview: A note with emphasis on the emerging cannot classify category. *Infant Mental Health Journal*, 17(1), 4-11.
- Hesse, E. (2008). The Adult Attachment Interview: Protocol, method of analysis, and empirical studies. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research,* and clinical applications (2nd ed., pp. 552-598). New York, NY: Guilford Press.
- Hesse, E., & Main, M. (1999). Second-generation effects of unresolved trauma as observed in non-maltreating parents: Dissociated, frightened and threatening parental behavior. *Psychoanalytic Inquiry*, 19, 481-540.
- Hesse, E., & Main, M. (2000). Disorganized infant, child, and adult attachment: Collapse in behavioral and attentional strategies. *Journal of the American Psychoanalytic*

Association, 48, 1097-1127.

- Hesse, E., & Main, M. (2006). Frightened, threatening, and dissociative parental behavior in low-risk samples: Description, discussion, and interpretations. *Developmental Psychopathology*, 18(2), 309-43.
- Isosävi, S., Flykt, M., Belt, R., Posa, T., Kuittinen, S., Puura, K., & Punamäki, R. L. (2016). Attachment representations among substance-abusing women in transition to motherhood: Implications for prenatal emotions and mother–infant interaction. *Attachment & Human Development*, 18(4), 391-417.
- Iyengar, U., Kim, S., Martinez, S., Fonagy, P., & Strathearn, L. (2014). Unresolved trauma in mothers: Intergenerational effects and the role of reorganization. *Frontiers in Psychology*, 5, Article 966.
- Jacobvitz, D., Hazen, N., Zaccagnino, M., Messina, S., & Beverung, L. (2011). Frightening maternal behavior, infant disorganization, and risks for psychopathology. In D. Cicchetti & G. I. Roisman (Eds.), *Minnesota symposia on child psychology: The origins and organization of adaptation and maladaptation* (Vol. 36, pp. 283-322). New York, NY: Wiley.
- Kilbride, A., Terry, M., Lyons-Ruth, K., & Slade, A. (2020). *Pervasively unintegrated, highly defended/helpless states of mind on the Parent Development Interview: A classification and coding manual.* Unpublished manual, Yale Child Study Center, New Haven, CT.
- Kim, S. (2015). The mind in the making: Developmental and neurobiological origins of mentalizing. *Personality Disorders: Theory, Research, and Treatment*, 6(4), 356-365.
- Kim, S., Fonagy, P., Allen, J., & Strathearn, L. (2014). Mothers' unresolved trauma blunts amygdala response to infant distress. *Social Neuroscience*, 9(4), 352-363.

- Kim, P., Leckman, J. F., Mayes, L. C., Feldman, R., Wang, X., & Swain, J. E. (2010). The plasticity of human maternal brain: longitudinal changes in brain anatomy during the early postpartum period. *Behavioral Neuroscience*, 124(5), 695-700.
- Kim, P., Strathearn, L., & Swain, J. E. (2016). The maternal brain and its plasticity in humans. *Hormones and Behavior*, 77, 113-123.
- Liotti, G. (2017). Conflicts between motivational systems related to attachment trauma: Key to understanding the intra-family relationship between abused children and their abusers. *Journal of Trauma & Dissociation, 18*(3), 304-318.
- Lyons-Ruth, K. (1996). Attachment relationships among children with aggressive behavior problems: The role of disorganized early attachment patterns. *Journal of Consulting and Clinical Psychology*, *64*(1), 64-73.
- Lyons-Ruth, K. (2002). The two-person construction of defenses: Disorganized attachment strategies, unintegrated mental states, and hostile/helpless relational processes. *Journal of Infant, Child, and Adolescent Psychotherapy*, 2(4), 107-119.
- Lyons-Ruth, K. (2003). Dissociation and the parent–infant dialogue: A longitudinal perspective from attachment research. *Journal of the American Psychoanalytic Association*, *51*(3), 883-911.
- Lyons-Ruth, K. (2007). The interface between attachment and intersubjectivity: Perspective from the longitudinal study of disorganized attachment. *Psychoanalytic Inquiry*, *26*(4), 595-616.
- Lyons-Ruth, K. (2008). Contributions of the mother–infant relationship to dissociative, borderline, and conduct symptoms in young adulthood. *Infant Mental Health Journal, 29*(3), 203-218.

- Lyons-Ruth, K., & Block, D. (1996). The disturbed caregiving system: Relations among childhood trauma, maternal caregiving, and infant affect and attachment. *Infant Mental Health Journal*, 17(3), 257-275.
- 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. 33-70). New York, NY: Guilford Press.
- Lyons-Ruth, K., Bronfman, E., & Parsons, E. (1999). IV. Maternal frightened, frightening, or atypical behavior and disorganized infant attachment patterns. *Monographs of the Society for Research in Child Development, 64*(3), 67-96.
- Lyons-Ruth, K., Holmes, B., & Hennighausen, K. (2005). Prospective longitudinal predictors of borderline and conduct symptoms in late adolescence: The early caregiving context. In P. Hobson & K. Lyons-Ruth (Co-Chairs), Borderline psychopathology and early caregiving: Concurrent and longitudinal relations. Symposium conducted at the biennial meeting of the Society for Research in Child Development, Atlanta, GA.
- Lyons-Ruth, K., & Jacobvitz, D. (2008). Attachment disorganization: Genetic factors, parenting contexts, and developmental transformation from infancy to adulthood. In J. Cassidy & P. R. Shaver, (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 666-697). New York, NY: Guilford Press.
- Lyons-Ruth, K., & Jacobvitz, D. (2016). Attachment disorganization from infancy to adulthood: Neurobiological correlates, parenting contexts, and pathways to disorder. In J. Cassidy & P. Shaver (Eds.), *Handbook of Attachment: Theory, research, and clinical applications* (3rd ed., pp. 667-695). New York, NY: Guilford Press.

Lyons-Ruth, K., Melnick, S., Bronfman, E., Sherry, S., & Llanas, L. (2004). Hostile-helpless

relational models and disorganized attachment patterns between parents and their young children: Review of research and implications for clinical work. In L. Atkinson & S. Goldberg (Eds.), *Attachment issues in psychopathology and intervention* (pp. 65-94). Hillsdale, NJ: Lawrence Erlbaum Associates.

Lyons-Ruth, K., Melnick, S., Yellin, C., Atwood. G. (1995-2005). Pervasively unintegrated/hostile-helpless states of mind on the Adult Attachment Interview.
Unpublished coding manual, Department of Psychiatry, Cambridge Hospital/Harvard Medical School, Cambridge, MA.

Lyons-Ruth, K., Pechtel, P., Yoon, S. A., Anderson, C. M., & Teicher, M. H. (2016).
 Disorganized attachment in infancy predicts greater amygdala volume in adulthood.
 Behavioural Brain Research, 308, 83-93.

- Lyons-Ruth, K., & Spielman, E. (2004). Disorganized infant attachment strategies and helplessfearful profiles of parenting: Integrating attachment research with clinical intervention. *Infant Mental Health Journal*, 25(4), 318-335.
- Lyons-Ruth, K., Yellin, C., Melnick, S., & Atwood, G. (2003). Childhood experiences of trauma and loss have different relations to maternal unresolved and hostile-helpless states of mind on the AAI. *Attachment and Human Development*, *5*, 330-352.
- Lyons-Ruth, K., Yellin, C., Melnick, S., & Atwood, G. (2005). Expanding the concept of unresolved mental states: Hostile/Helpless states of mind on the Adult Attachment Interview are associated with disrupted mother–infant communication and infant disorganization. *Development and Psychopathology*, 17, 1-23.
- Madigan, S., Atkinson, L., Laurin, K., & Benoit, D. (2013). Attachment and internalizing behavior in early childhood: A meta-analysis. *Developmental Psychology*, 49(4), 672-

689.

- 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.
- Madigan, S., Brumariu, L. E., Villani, V., Atkinson, L., & Lyons-Ruth, K. (2016).
 Representational and questionnaire measures of attachment: A meta-analysis of relations to child internalizing and externalizing problems. *Psychological Bulletin, 142*(4), 367-399.
- 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.
- Main, M., & Goldwyn, R. (1984). Adult attachment scoring and classification system. Unpublished manuscript, University of California at Berkeley, Berkeley, CA.
- 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. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research and intervention* (pp. 161-184). Chicago, IL: University of Chicago Press.
- Main, M., & Hesse, E. (1992). Frightened, threatening, dissociative, timid-deferential, sexualized, and disorganized parental behavior: A coding system for frightened/frightening (FR) parent-infant interactions. Unpublished manual, University of California, Berkeley, CA.

- Main, M., Hesse, E., & Kaplan, N. (2005). Predictability of attachment behavior and representational processes at 1, 6, and 18 years of age: The Berkeley longitudinal study. In K. E. Grossmann, K. Grossmann, & E. Waters (Eds.), *Attachment from infancy to adulthood* (pp. 245-304). New York, NY: Guilford 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.
- Main, M., & Solomon, J. (1986). Discovery of an insecure-disorganized/disoriented attachment pattern. In T. B. Brazelton & M. W. Yogman (Eds.), *Affective development in infancy* (pp. 95-124). Westport, CT: Ablex Publishing.
- Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 121-160). Chicago, IL: University of Chicago Press.
- Melnick, S., Finger, B., Hans, S., Patrick, M., & Lyons-Ruth, K. (2008). Hostile-helpless states of mind in the AAI: A proposed additional AAI category with implications for identifying disorganized infant attachment in high-risk samples. In H. Steele & M. Steele (Eds.), *Clinical applications of the Adult Attachment Interview* (p. 399-423). New York, NY: Guilford Press.
- Milot, T., Lorent, A., St-Laurent, D., Bernier, A., Tarabulsy, G., Lemelin, J. P., & Ethier, L. S.
 (2014). Hostile-Helpless state of mind as further evidence of adult disorganized states of mind in neglecting families. *Child Abuse & Neglect, 38*(8), 1351-1357.

National Scientific Council on the Developing Child. (2004). Young children develop in an

environment of relationships: Working paper no. 1. Center on the Developing Child, Harvard University, Cambridge, MA.

- 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.
- Ogawa, J. R., Sroufe, L. A., Weinfield, N. S., Carlson, E. A., & Egeland, B. (1997). Development and the fragmented self: Longitudinal study of dissociative symptomatology in a nonclinical sample. *Development and Psychopathology, 9*(4), 855-879.
- Oppenheim, D., & Koren-Karie, N. (2002). Mothers' insightfulness regarding their children's internal worlds: The capacity underlying secure child-mother relationships. *Infant Mental Health Journal*, 23(6), 593-605.
- Oppenheim, D., Koren-Karie, N., & Sagi, A. (2001). Mothers' empathic understanding of their preschoolers' internal experience: Relations with early attachment. *International Journal of Behavioral Development, 25*(1), 16-26.
- Sadler, L. S., Slade, A., Close, N., Webb, D. L., Simpson, T., Fennie, K., & Mayes, L. C. (2013).
 Minding the Baby: Enhancing reflectiveness to improve early health and relationship outcomes in an interdisciplinary home-visiting program. *Infant Mental Health Journal*, 34(5), 391-405.
- Sadler, L. S., Slade, A., & Mayes, L. C. (2006). Minding the Baby: A mentalization-based parenting program. In J. G. Allen & P. Fonagy (Eds.), *The handbook of mentalizationbased treatment* (pp. 271-288). Hoboken, NJ: John Wiley & Sons, Inc.

Shonkoff, J. P. (2010). Building a new biodevelopmental framework to guide the future of early

childhood policy. Child Development, 81(1), 357-367.

- Shonkoff, J. P., & Fisher, P. A. (2013). Rethinking evidence-based practice and two-generation programs to create the future of early childhood policy. *Development and Psychopathology*, 25(4, Pt 2), 1635-1653.
- Shonkoff, J. P., & Levitt, P. (2010). Neuroscience and the future of early childhood policy: Moving from why to what and how. *Neuron*, 67(5), 689-691.
- Schore, A. N. (2000). Attachment and the regulation of the right brain. *Attachment & Human* Development, 2(1), 23-47.
- Schore, A. N. (2001). Effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal, 22*(1-2), 7-66.
- Schore, A. N. (2005). Attachment, affect regulation, and the developing right brain: Linking developmental neuroscience to pediatrics. *Pediatrics in Review, 26*(6), 204-217.
- Schuengel, C., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (1999). Frightening maternal behavior linking unresolved loss and disorganized infant attachment. *Journal of Consulting and Clinical Psychology*, 67(1), 54-63.
- Siegel, D. J. (2012). *The developing mind: How relationships and the brain interact to shape who we are.* New York, NY: Guilford Publications.
- Slade, A. (1999). Representation, symbolization and affect regulation in the concomitant treatment of a mother and child: Attachment theory and child psychotherapy. *Psychoanalytic Inquiry*, 19, 797-830.
- Slade, A. (2000). The development and organization of attachment: Implications for psychoanalysis. *Journal of the American Psychoanalytic Association, 48*, 1147-1174.

Slade, A. (2003). The Pregnancy Interview. Unpublished manuscript, Yale Child Study Center,

New Haven, CT.

- Slade, A. (2004). The move from categories to process: Attachment phenomena and clinical evaluation. *Infant Mental Health Journal*, *25*(4), 269-283.
- Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment & Human Development*, 7(3), 269-281.
- Slade, A. (2014). Imagining fear: Attachment, threat, and psychic experience. *Psychoanalytic Dialogues*, *24*, 253-266.
- Slade, A., Aber, J. L., Berger, B., Bresgi, I., & Kaplan, M. (2003). *The Parent Development Interview—Revised*. Unpublished manuscript, Yale Child Study Center, New Haven, CT.
- Slade, A., Belsky, J., Aber, J. L., & Phelps, J. L. (1999). Mothers' representations of their relationships with their toddlers: Links to adult attachment and observed mothering. *Developmental Psychology*, 35(3), 611-619.
- Slade, A., Bernbach, E., Grienenberger, J., Levy, D., & Locker, A. (2004). Addendum to Fonagy, Target, Steele, & Steele reflective functioning scoring manual for use with the Parent Development Interview. Unpublished manuscript, Yale Child Study Center, New Haven, CT.
- Slade, A., Cohen, L. J., Sadler, L. S., & Miller, M. (2008). The psychology and psychopathology of pregnancy: Reorganization and transformation. In C. H. Zeanah, Jr. (Ed.), *Handbook* of infant mental health (3rd ed., pp. 22-39). New York, NY: Guilford Press.
- Slade, A., Grienenberger, J., Bernbach, E., Levy, D., & Locker, A. (2005). Maternal reflective functioning, attachment, and the transmission gap: A preliminary study. *Attachment & Human Development*, 7(3), 283-298.

Slade, A., Holland, M. L., Ordway, M. R., Carlson, E. A., Jeon, S., Close, N., . . . Sadler, L. S.

(2019). Minding the Baby[®]: Enhancing parental reflective functioning and infant attachment in an attachment-based, interdisciplinary home visiting program. *Development and Psychopathology, 32*(1), 1-15.

- Slade, A., & Sadler, L. S. (2018). Pregnancy and infant mental health. In C. H. Zeanah, Jr. (Ed.), Handbook of infant mental health (4th ed., pp. 25-40). New York, NY: Guilford Publications.
- Sleed, M., Slade, A., & Fonagy, P. (2018). Reflective functioning on the Parent Development Interview: Validity and reliability in relation to socio-demographic factors. *Attachment & Human Development*, 1-22.
- Solomon, J., & George, C. (1996). Defining the caregiving system: Toward a theory of caregiving. *Infant Mental Health Journal*, 17(3), 183-197.
- Solomon, J., & George, C. (2006). Intergenerational transmission of dysregulated maternal caregiving: Mothers describe their upbringing and child rearing. In O. Mayseless (Ed.), *Parenting representations: Theory, research, and clinical implications* (pp. 265-295). New York, NY: Cambridge University Press.
- Solomon, J., & George, C. (2011). Disorganization of maternal caregiving across two generations. In J. Solomon & C. George (Eds.), *Disorganized attachment & caregiving* (pp. 25-51). New York, NY: 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.
- Sroufe, L. A. (1979). The coherence of individual development. *American Psychologist, 34*(10), 834-841.

- Sroufe, L. A. (2005). Attachment and development: A prospective, longitudinal study from birth to adulthood. *Attachment & Human Development*, 7(4), 349-367.
- Sroufe, L. A., Carlson, E. A., Levy, A. K., & Egeland, B. (1999). Implications of attachment theory for developmental psychopathology. *Development and Psychopathology*, 11(1), 1-13.
- Sroufe, L. A., Coffino, B., & Carlson, E. A. (2010). Conceptualizing the role of early experience: Lessons from the Minnesota longitudinal study. *Developmental Review*, 30(1), 36-51.
- Stacks, A. M., Muzik, M., Wong, K., Beeghly, M., Huth-Bocks, A., Irwin, J. L., & Rosenblum,
 K. L. (2014). Maternal reflective functioning among mothers with childhood
 maltreatment histories: Links to sensitive parenting and infant attachment security. *Attachment & Human Development*, 16(5), 515-533.
- Steinberg, D. R., & Pianta, R. C. (2006). Maternal representations of relationships: Assessing multiple parenting dimensions. In O. Mayseless (Ed.), *Parenting representations: Theory, research, and clinical implications* (pp. 41-78). New York, NY: Cambridge University Press.
- Suchman, N. E., DeCoste, C., Leigh, D., & Borelli, J. (2010). Reflective functioning in mothers with drug use disorders: Implications for dyadic interactions with infants and toddlers. *Attachment & Human Development*, 12(6), 567-585.
- Swain, J. E., Kim, P., Spicer, J., Ho, S. S., Dayton, C. J., Elmadih, A., & Abel, K. M. (2014). Approaching the biology of human parental attachment: Brain imaging, oxytocin and coordinated assessments of mothers and fathers. *Brain Research*, 1580, 78-101.
- Terry, M. (2018). *Linking Hostile/Helpless maternal representations in pregnancy and later child protection involvement: A pilot study.* Unpublished doctoral dissertation, The City

University of New York, New York, NY.

- Terry, M., Finger, B., Slade, A., Lyons-Ruth, K. (2018). An Adaptation of Karlen Lyons-Ruth's Pervasively Unintegrated, Highly Defended/Helpless States of Mind on the Adult Attachment Interview classification and coding manual: For use with the Pregnancy Interview. Unpublished coding manual, The City University of New York, New York, NY.
- Terry, M., Finger, B., Lyons-Ruth, K., Sadler, L. S., & Slade, A. (2020). Hostile/helpless maternal representations in pregnancy and later child removal: A pilot study. Manuscript submitted for publication.
- van IJzendoorn, M. H., Schuengel, C., & Bakermans-Kranenburg, M. J. (1999). Disorganized attachment in early childhood: Meta-analysis of precursors, concomitants, and sequelae. *Development & Psychopathology*, 11(2), 225-249.
- van IJzendoorn, M. H. (1995). Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the Adult Attachment Interview. *Psychological Bulletin*, *117*(3), 387-403.
- Verhage, M. L., Schuengel, C., Madigan, S., Fearon, R. M. P., Oosterman, M., Cassibba, R., Bakermans-Kranenburg, M. J., & van IJzendoorn, M. H. (2016). Narrowing the transmission gap: A synthesis of three decades of research on intergenerational transmission of attachment. *Psychological Bulletin*, 142(4), 337-366.
- Vreeswijk, C. M., Maas, A. J. B., & van Bakel, H. J. (2012). Parental representations: A systematic review of the Working Model of the Child Interview. *Infant Mental Health Journal*, 33(3), 314-328.

Vyas, A., Jadhav, S., & Chattarji, S. (2006). Prolonged behavioral stress enhances synaptic

connectivity in the basolateral amygdala. Neuroscience, 143(2), 387-393.

- Vyas, A., Pillai, A. G., & Chattarji, S. (2004). Recovery after chronic stress fails to reverse amygdaloid neuronal hypertrophy and enhanced anxiety-like behavior. *Neuroscience*, *128*(4), 667-673.
- Winnicott, D.W. (1965). Ego distortion in terms of true and false self. In *The maturational* processes and the facilitating environment: Studies in the theory of emotional development (pp. 140-153). London, UK: Hogarth Press and Institute of Psycho-Analysis.
- Zeanah, C. H., & Barton, M. L. (1989). Internal representations and parent–infant relationships. *Infant Mental Health Journal*, 10(3), 135-141.
- Zeanah, C. H., Benoit, D., Hirshberg, L., Barton, M. L., & Regan, C. (1994). Mothers' representations of their infants are concordant with infant attachment classifications. *Developmental Issues in Psychiatry and Psychology*, 1(1), 1-14.