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Dysregulated Motherhood: Exploring the Risk Features in a Mother's Caregiving Representations

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Abstract

In the case of a mother with dysregulating attachment experiences and current enrolment in a

parent–infant psychotherapy process, we explored which Insecure, Hostile/Helpless and Pre-

mentalizing risk features were similar in her attachment and caregiving representations; which risk

features were specific to her caregiving representations; and how these theory-defined features

overlapped in detecting caregiving risks. Risk features in the attachment representations were

assessed from the Adult Attachment Interview and risk features in the caregiving representations

from written psychotherapy notes. We found similar Insecure (Preoccupied and Disorganized), Pre-

mentalizing and Hostile/Helpless instances from both the attachment and the caregiving

representations. However, confusion between self and child, greater variance in lapses into Pre-

mentalizing, and specific and concrete fears and helplessness were unique to the caregiving

representations. Hostile/Helpless instances were found in tandem with almost all Insecure and Pre-

mentalizing instances, indicating that this conceptualization captured risks in the caregiving

representations most comprehensively. Fearful and Helpless caregiving representations occurred somewhat independently from other risk conceptualizations, suggesting that they need to be identified as independent phenomena. The results imply that detecting specific manifestations of intergenerational risks from caregiving representations is possible and is called for.

Key words: Representations, Insecure, Hostile/Helpless, Pre-mentalizing, Parent–infant psychotherapy

Attachment representations are partly conscious and partly subconscious internal working models of the self in relation to one's primary caregivers. When a mother's caregivers have not helped her in regulating overwhelming stress and affects in early childhood, the unbearable experiences can be internalized as problematic representations of close relationships. In the transition to parenthood, working models of such dysregulating relationships are specifically activated, and they affect the caregiving representations that a woman constructs of herself as a mother, of her infant and of the mother–infant relationship (Bretherton & Munholland, 2008; Slade, Cohen, Sadler, & Miller, 2009; Stern, 1995). However, caregiving representations are also distinct from attachment representations in their developmental process and formation. As they determine a mother's caregiving behaviour towards her child, caregiving representations are a central target for assessment and treatment in parent–infant interventions (Slade, 1999; Stern, 1995; Baradon et al., 2009).

Research shows that risk features in both mothers' attachment and caregiving representations can lead to caregiving behaviour that dysregulates rather than helps the infant (Crawford & Benoit, 2009; Lyons-Ruth, Yellin, Melnick, & Atwood 2005). Such disrupted mother–infant interactions, in turn, are linked with the child's disorganized attachment in infancy and dissociation and personality disorders in adulthood (Dutra, Bureau, Holmes, Lyubhik, & Lyons-Ruth, 2009; Hesse & Main, 1999; Lyons-Ruth, Dutra, Schuder, & Bianchi, 2006; Madigan et al., 2006). Thus, risk features in representations appear central to the transgenerational transmission of dysregulating attachment relationships and consequential psychopathologies. However, there are notable gaps in previous research.

First, it is unclear what risk features are transmitted from attachment representations onto caregiving representations, as well as whether the caregiving role elicits specific representational risks. Second, different theories conceptualize representational risk features in diverse ways. Currently, most potent conceptualizations include those of Insecure and Hostile/Helpless representations, as well as parental failures in mentalizing. To identify key representational targets

for parent–infant interventions, research is needed that compares and integrates these conceptualizations. Lastly, research is lacking on how risks in caregiving representations manifest in parent–infant interventions.

In an attempt to address these gaps, we studied the case of a mother with a dysregulating attachment history, enrolled in parent–infant psychotherapy together with her son. We explored the correspondence of risks in the mother's attachment representations as assessed with standard research instruments, and caregiving representations as they manifested in the psychotherapy process. We further examined whether there were risk features particular to the caregiving representations and to what degree different theoretical definitions of representational risks overlap or occur independently from each other in caregiving representations.

Caregiving Representations and the Regulation of the Parent–Infant Relationship

Internal working models of caregiving take influence from a mother's attachment representations, but are also distinctive of them. They are organized around the motivation of protecting the infant at times of stress, rather than seeking safety for oneself (George & Solomon, 2008; Solomon & George, 1996). Furthermore, rather than originating in the mother's past, the caregiving representations are formulated in the here-and-now situation of becoming a parent, and they are affected by the family's current stresses and resiliencies and the infant's characteristics (Huth-Bocks, Levendosky, Bogat, & Von Eye, 2004; Van Bakel & Riksen-Walraven, 2002).

As an infant cannot regulate his/her own arousal or affective states, he/she needs the caregiver's regulatory help to maintain a tolerable arousal state in which development can proceed (Calkins & Hill, 2007; Sroufe, 1995). Caregiving representations that are coherent, realistic and mostly positive allow a mother to detect infant signals accurately and to respond to these in a sensitive manner that regulates the infant (Demers, Bernier, Tarabulsy, & Provost, 2010; Slade et al., 1999). A mother's mentalising ability, operationalised as reflective functioning (RF)—the capability to accurately and unknowingly reflect on her own and her infant's mental states

underlying behaviour and interactions—also links closely to her contingent responsiveness (Slade, Grienenberger, Bernbach, Levy, & Locker, 2005). Research shows that balanced maternal representations and high RF are likely to lead to securely attached infants (Grienenberger, Kelly, & Slade, 2005; Slade, et al., 2005; Vreeswijk, Maas, & van Bakel, 2012), who have internalised regulatory interactions to develop adaptive stress and emotion regulation abilities (Rosenblum, Dayton, & Muzik, 2009). The child's secure attachment and regulatory abilities then promote lifetime mental health and the ability to respond sensitively to one's own offspring (Gross & Muñoz, 1995; Schore, 2001; van Ijzendoorn, 1995).

Intergenerational Transmission of Dyadic Dysregulation

Lack of caregiver help in regulating stress and arousal in one's infancy is likely internalized as difficulties in regulating stress and emotions later in life (Fonagy, Gergely, Jurist, & Target, 2002). A mother's early experiences of overwhelming stress can be involuntarily activated by her own infant's cries and neediness, as well as by her responsibility to take care of him/her (Fraiberg, Adelson, & Shapiro, 1975; George & Solomon, 2008; Schechter & Willheim, 2009). Such an intolerable affect and the inability to regulate it leads to a breakdown of maternal mentalizing (Arnsten, 1998, 2000; Fonagy, 2018), predisposing the mother to interpreting infant signals in distorted ways and repeating the dysregulating caregiving pattern with him/her (Grienenberger et al., 2005).

Relational dysregulation has been called "the hidden trauma" of infancy: there is no evident exposure to traumatic events, but instead, the quality of caregiver–infant interactions predisposes the child to overwhelming stress (Bureau, Martin, & Lyons-Ruth, 2010). Maternal dysregulating behaviour can take the form of failing to help the infant at times of high arousal and instead becoming fearful, helpless or withdrawn or intensifying the infant's stress through hostile, role-reversed or intrusive behaviours (Lyons-Ruth, Bronfman, & Atwood, 1999; Lyons-Ruth et al., 2005). Consequently, the infant faces an unsolvable problem of being unable to approach the

caregiver at times of heightened stress. This most notably manifests as the infant's disorganized

attachment (Hesse & Main, 2000; Main & Solomon, 1990). Mothers with insecure and/or traumatic

attachment histories and poor stress and emotion regulation also commonly suffer from mood and

personality disorders (Carlson, 1998; Fonagy et al., 2002), which in themselves compromise the

dyadic interaction quality (Lovejoy, Graczyk, O'Hare, & Neuman, 2000; Nicol-Harper, Harvey, &

Stein, 2007; Stepp, Whalen, Pilkonis, Hipwell, & Levine, 2012).

Insecure Representations

The representational risks that underlie dysregulating caregiver–infant relationships have been

mostly studied from mothers' attachment, but also to some degree from caregiving representations.

The semi-structured Adult Attachment Interview (AAI; George, Kaplan, Main, 1985) assesses the

coherence and quality of individuals' narratives of their attachment experiences. It identifies

different patterns of Insecure attachment representations that are likely to develop because of

caregivers' insufficient sensitivity. The hallmark of Insecure attachment representations is

individuals' limited ability to and unbalanced manner of exploring their attachment experiences

(see e.g. Hesse, 2008). Individuals with Dismissing attachment representations attempt to turn

attention away from attachment-activating memories by claiming not to remember them and/or by

idealizing or derogating their caregivers. The narratives are typically general and remote from

experiences, with descriptions of self and others as normal, strong and independent (Main,

Goldwyn, & Hesse, 2003).

Individuals with Preoccupied attachment representations, in turn, become confused or

entangled in describing their past or current relationship to their parents. Their narratives are

characterized by preoccupying affect of anger or, more rarely, fear. Portraying a lack of

differentiation from their parents, preoccupied individuals fail to articulate their individual point of

view and instead give long, confusing and oscillating answers; make linguistic mix-ups between

themselves and their parents; and claim to "know" their parents' intentions. The lack of balance in

preoccupied narratives is further evident in excessive blaming of either oneself or one's parents for relational difficulties (Main et al., 2003).

In addition to these two organized Insecure representational strategies, individuals can show Unresolved/Disorganized states of mind in response to questions of loss or trauma. Indicating a collapse in the attentional-emotional processing of the painful experience, lapses at the level of reasoning (e.g. talking about a deceased parent in present tense; feeling causal for loss or trauma experiences), speech (e.g. sudden change in speech pattern to detailed or eulogistic speech; inability to finish sentences) and behaviour (e.g. reports of suicide attempts) are evident in Unresolved/Disorganized narratives (Hesse & Main, 2000; Main et al., 2003).

Research shows that mothers with all Insecure attachment representations show problems in dyadic regulation. Dismissing mothers' interactions are characterized by unresponsiveness and a failure to regulate their infants' negative emotions (Crowell & Feldman, 1988; Riva Grucnola et al., 2013). Preoccupied mothers, in turn, display more hostility, intrusiveness and unpredictability in interactions (Adam, Gunnar, & Tanaka, 2004; Cohn, Cowan, Cowan & Pearson, 1992; Crowell & Feldman, 1988). Maternal Unresolved/Disorganized attachment representations are associated with perhaps the most dysregulating—frightened and frightening—caregiving behaviours (Abrams, Rifkin, & Hesse, 2006; Hesse & Main, 2006; Jacobvitz, Leon, & Hazen, 2006; Schuengel, Bakermans- Kranenburg, & van Ijzendoorn, 1999).

In addition to the Unresolved/Disorganized, the Preoccupied attachment representations might also serve as an index of risk for severe dysregulation in the mother–infant relationship. They are both associated with infant disorganized attachment (Hesse & Main, 2000; Madigan et al., 2006; van Ijzendoorn, 1995) and are highly prevalent among mothers with borderline personality disorder, who suffer from severe difficulties in self- and dyadic regulation (Barone, 2003; Macfie, Swan, Fitzpatrick, Watkins, & Rivas, 2014). In fact, research shows that the Preoccupied and Unresolved/Disorganized representations reflect similar underlying states of mind (Haltigan,

Roisman, & Haydon, 2014). It is suggested that preoccupying fear in particular may be better understood as a response to traumatic attachment experiences than as an organized representational strategy (Main et al., 2003).

Research on the Insecure features of caregiving representations has mostly utilized the semi-structured Working Model of the Child Interview (WMCI; Zeanah, Benoit, Barton, & Hirshberg, 1996), which depicts parents' representations of a specific child and their relationship to him/her. The WMCI indentifies Non-Balanced, Disengaged and Distorted, caregiving representations that correspond with Dismissing and Preoccupied attachment representations. A separate classification system has been developed to detect Disrupted caregiving representations that correspond with affectively contradictory, withdrawn, fearful, disoriented, hostile/intrusive and role-reversed dimensions of dysregulating caregiving behaviour (Crawford & Benoit, 2009).

Alike the Insecure attachment representations, the Non-balanced and Disrupted caregiving representations are also linked with relational dysregulation and poor developmental outcomes. Mothers with Disengaged representations show low involvement and sensitivity towards their children (Sokolowski, Hans, Bernstein & Cox, 2007), and mothers with Distorted representations are likely to behave in hostile and disororganized manner (Korja et al., 2010; Schechter et al., 2008). Accordingly, the Disengaged and Distorted representations are linked with infant insecure attachment (Benoit, Parker, & Zeanah, 1997) and poor infant affect regulation (Rosenblum et al., 2002). Prenatally assessed Disrupted representations, in turn, are associated with infant disorganized status even without maternal Unresolved/Disorganized classification in the AAI (Crawford & Benoit, 2009). Importantly, prior research also shows that mothers' non-Balanced and Distorted caregiving representations mediate the link between organized-Insecure attachment representations and infant insecure attachment (Madigan, Hawkins, Plamondon, Moran, & Benoit, 2015), as well as that between Unresolved/Disorganized attachment representations and disorganized infant attachment (Crawford & Benoit, 2009), respectively.

In sum, both the Insecure attachment and caregiving representations pose risk for mother–infant interactions, with the Disorganized and perhaps also Preoccupied[1] representations indicating the most severe dysregulation. The harmful effects of Insecure attachment representations are shown to be transmitted onto the relationship via Insecure caregiving representations. However, firstly, there is no research on whether the Insecure features of the attachment representations are transmitted onto the caregiving representations as such, or whether they show caregiving-specific manifestations. Secondly, the Insecure attachment representations only explain variance in infant attachment to a modest degree (van Ijzendoorn, 1995; van Ijzendoorn, Schuengel, & Bakermans-Kranenburg, 1999), suggesting that other representational risks need to be identified.

Unintegrated Hostile and Helpless-Fearful Representations

Research shows that the representations of mothers with a history of attachment and later interpersonal trauma differ from the Insecure attachment representations. Such working models of severely dysregulating relationships are characterised by Hostile/Helpless views of self and others as perpetrators and/or victims, and descriptions of self as pervasively bad or unworthy are common. A core feature of the Hostile/Helpless representations is their global unintegration into individual's self-narrative, rather than narrow lapses in attentional-emotional strategies regarding single losses and traumas. (Lyons-Ruth, Bronfman, & Atwood, 1999; Lyons-Ruth & Jacobvitz, 1999; Lyons-Ruth et al., 2005).

The segregation or unintegration of the Hostile/Helpless representations can come across as individuals' inability to think or talk about attachment experiences in the AAI. On the other hand, the rigid and immature defences also break down easily and leave individuals overwhelmed with painful affect when the Hostile/Helpless representations are activated (George & Solomon, 2008; Lyons-Ruth & Atwood, 2004; Lyons-Ruth et al., 2005). Unable to reflect upon their

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[1] For clarity,we use the terms "Insecure" (corresponding with "Non-Balanced"), "Preoccupied" (corresponding with "Distorted"), and "Disorganized" (corresponding with "Disrupted") of the Insecure features of both the attachment and the caregiving representations.

representations, individuals with Hostile/Helpless working models typically describe their representations as realities and as being objects rather than subjects of them. The narratives can show unnoticed contradictions and unconscious identification with the hostile, helpless and fearful sides of caregivers (Lyons-Ruth & Melnick, 2004; Lyons-Ruth et al., 2005).

Research confirms that mothers' Hostile/Helpless attachment representations are connected to dysregulating caregiving behaviour (Lyons-Ruth, Bronfman, & Parsons, 1999). Importantly, the Hostile/Helpless attachment representations are also associated with infant disorganised attachment beyond the effect of Unresolved/Disorganised attachment representations (Finger, 2006; Lyons-Ruth et al., 2005). The Helpless and Fearful representations in particular can underlie mothers' subtle and hard-to-spot dysregulating behaviours, such as hesitancy to respond to infant attachment needs. Thus, they might be key risk indicators among lower-risk groups where overtly problematic behaviour, such as maltreatment, is not common (Lyons-Ruth, 2003).

We found only two studies that have investigated the Hostile/Helpless features of caregiving representations. They utilized the semi-structured Pregnancy Interview (PI; Slade, 2011) and the Parent Development Interview (PDI; Slade, Aber, Bresgi, Berger, & Kaplan, 2004), which probe about (developing) views of oneself as a parent, of the child and of the relationship. The results show that Hostile/Helpless representations are associated with maternal psychopathology and poor quality parent–infant interactions (Sleed, 2013), as well as with infant foster care placement (Terry, 2018). Despite this preliminary evidence that Hostile/Helpless features of caregiving representations are useful risk indicators, it remains unknown if there are specific manifestations of such representations that the caregiving role activates.

Mentalizing Failures

The multiple stresses and intense emotions that characterize caregiving challenge every parents' mentalizing ability. However, individuals with dysregulating attachment histories and poor current

stress and emotion regulation abilities show frequent and severe breakdowns in their RF, particularly in attachment-activating interpersonal contexts such as parenting (Mayes, 2000).

Mentalization theory identifies the emergence of Pre-mentalizing—Psychic equivalence, Teleological and Pretend modes—as an indicator of mentalizing failures. Lapses into Psychic equivalence are characterized by an individual's experience of her mental states as "too real" or isomorphic to the world: for example, a client might interpret a delay in a physician's consultation schedule as intentional viciousness targeted personally to her/him. In the Teleological mode, mental states are only acknowledged as real when they are manifested as actions. For example, a mother might demand repeated hugs and kisses from her toddler and elevate his separation anxiety in order to feel loved by him. Lapses into the Pretend mode are manifested as apparent mentalizing, which is, however, too unreal: unattached to subjective experience or observations of the environment. For example, a psychotherapy patient could talk at length about her experience in a clichéd way or citing psychological theory (pseudomentalize); make intrusive, unjustified assumptions about others' intentions (hypermentalize); or have far-off, distorted beliefs about her own and others' mental states (Allen, Fonagy, & Bateman, 2008; Bateman & Fonagy, 2012).

Research has mostly focused on mothers' general level of RF. Results show that mothers' ability to reflect on both their attachment and their caregiving representations is linked with positive relational and child outcomes, whereas mothers' low level of mentalizing disposes them to representational and relational disturbances. More specifically, mothers' high RF in the AAI is linked with infant secure attachment (Fonagy, Steele, Steele, Moran, & Higgitt, 1991) and discontinuity in the transmission of insecure attachment from attachment representations onto infant behaviour (Fonagy et al., 1995). Mothers' low caregiving-specific RF in the PDI, in turn, has been shown to associate with poor quality of mother–infant interactions, as well as with infant insecure and disorganized attachment (Grienenberger et al., 2005; Rosenblum, McDonough, Sameroff, & Muzik, 2008; Slade et al., 2005). High caregiving-specific RF (assessed from the WMCI), in turn,

protected traumatized mothers from forming distorted representations of their infants (Schechter et al., 2005). In addition, there is evidence that the harmful effects of caregiving-specific low RF on mother–infant interaction quality are mediated through high-risk (e.g. hostile, helpless, idealizing/role-reversing) caregiving representations (Sleed, 2013).

Although prior research identifies maternal mentalizing ability as a key determinant of maternal representations and of the quality of mother–infant relationships, assessment of the general level of RF does not inform how maternal mentalization failures and representational risks are manifested in the clinical realm of parent–infant interventions. Further, previous studies have not investigated whether the caregiving role provokes specific mentalization failures. Hence, we explore which Pre-mentalizing modes occur in one mother's attachment and caregiving representations and how they are linked with theoretically predetermined representational risks.

Research Questions

1. What risk features (Insecurity, Hostility/Helplessness and Pre-mentalizing modes) occurred both in the mother's attachment and caregiving representations?

2. Were there specific risk features that occurred only in the mother's caregiving representations?

3. To what extent did the Insecure, Hostile/Helpless and Pre-mentalizing features overlap in the mother's caregiving representations?

Method

Study Procedure and Data

The study data consist of the mother's (pseudonym "Kati") AAI (George et al., 1985) and the written psychotherapy notes of the parent–infant psychotherapy sessions that Kati and her son "Paavo" had with the first author. The first author wrote the psychotherapy notes into a client

information system of a communal parent–infant clinic after each session and conducted the AAI at the end of the psychotherapy process. The AAI was audiotaped and transcribed verbatim and translated from Finnish to English for coding purposes. The psychotherapy notes included reporting what had happened and what Kati had said in the sessions. Thus, the notes were not verbatim recordings of Kati's expressions, but they were not the psychotherapist's interpretations either. The psychotherapy process lasted for one year and three months in total, comprising 73 psychotherapy sessions. Of these, 61 pages of written text were available.

Kati was informed of the purpose of the study, namely, to explore the problematic features of the representations she had formed of her early relationships and how these were related to those formed of her motherhood and of her son. She gave written consent to use the data in research. The family service unit of the city of [*city name removed for anonymity]* evaluated the ethicality of the study and approved the study plan. As the study was conducted after the psychotherapy process and it utilised only data collected during the treatment, it did not affect the treatment nor pose any extra demands for the family. To ensure the family's anonymity, Kati read and approved the article's description of the family and the therapy process, and all identity information is masked.

Description of the Family and the Psychotherapy Process

Kati contacted the parent–infant psychotherapy unit because she was afraid that her difficult attachment experiences and current "neuroses", as she called them, would harm her seven-month-old firstborn son, Paavo. Kati also shared that she often felt Paavo did not like her but instead preferred his father "Tarmo", and she felt he looked at her in a judgemental way. The therapist met the family twice a week, one session being at the clinic for Kati alone and the other at home for Kati and Paavo together. Tarmo participated in the process infrequently despite invitations to be more involved.

Kati shared that in her childhood, her mother became helpless and fearful,especially when Kati expressed negative emotions, such as dissatisfaction or anger. Kati spoke about her father's

unpredictable angry outbursts and his harsh criticisms of her personality and actions. Kati described feeling as though she could not turn to her parents, but she could not detach from them either, because they often communicated a belief that the outside world was dangerous. Kati related her life-long history of anxiety, depression, social fears and limited dissociative symptoms to her attachment experiences and to her consequential lack of effective coping strategies. For years, she hesitated to become a mother because of a fear of transmitting the problems onto her child.

Kati described feeling severely anxious and fearful prenatally. During Paavo's infancy and during the therapy sessions, she became easily overwhelmed with her troubling thoughts. Kati expressed that the stresses of early parenthood, such as sleep deprivation and Paavo's cranky moods and challenging behaviours, made her upset. In the mid-phase of the psychotherapy process, Kati started to wish for a new pregnancy. After having an early miscarriage, she became pregnant. In addition to the great psycho-hormonal changes elicited by pregnancies and early caregiving, going on and off her antidepressant medication also contributed to Kati's depressed and fearful–anxious states of mind. Accordingly, in addition to exploring and trying to understand Kati's representations and interactions with Paavo, decreasing Kati's stress and strengthening her wellbeing as a parent became central treatment targets.

Kati and Paavo benefitted from parent–infant psychotherapy: Kati shared that she was more able to calibrate her stress-evoking thoughts and anxious feelings. Kati also became more able to describe especially her angry experiences as her own, rather than as something that happened to her. Besides presenting the representations that are the focus of this article, Kati also showed considerable courage, intelligence, and capability to work with the hurtful issues, as well as the ability to care warmly for Paavo. The psychotherapy process ended in a planned way, after which the family continued receiving tailored multi-professional help.

Measures and Data Analysis

  Risk features in attachment representations. These were analysed from the AAI (George et al., 1985), which probes about experiences with primary caregivers and the meanings individuals give to these as adults. The AAI includes questions of attachment-activating experiences, such as separations and being hurt, as well as questions of losses and traumatic experiences.

  The AAI was analysed with three different coding systems by independent, trained and reliable coders who were blind to all psychotherapy information and to each other's codings. First, the third author coded the AAI using the system of Main, Goldwyn and Hesse (2003) that classifies attachment representations as Secure/Autonomous, Insecure/Dismissing, Insecure/Preoccupied, or Insecure/Unresolved-Disorganized in relation to loss and trauma. The classification is based on scores given in nine-point scales evaluating childhood experiences, current state of mind with regard to attachment figure(s) (idealising, angry, derogatory), overall states of mind regarding attachment (derogation of attachment, lack of memory, metacognitive processes, passivity, fear of loss, coherence of mind, coherence of transcript), and unresolved states of mind (e.g. disorganised thought, speech, or behaviour).

  Second, the fourth author coded the AAI with the system identifying unintegrated, Hostile/Helpless states of mind regarding attachment (Lyons-Ruth & &Melnick, 2004). A narrative is scored in nine-point scales for Hostile and Fearful/Helpless states of mind. A transcript that receives a rating of five or higher receives a Hostile/Helpless classification. Further, one of three subclassifications is given: 1) predominantly Hostile/Defended, 2) mixed Hostile/Helpless, and 3) Helpless/Fearful state of mind.

  Third, the fifth author analysed the AAI with the coding system depicting reflective functioning (AAI-RF; Fonagy, Target, Steele, & Steele, 1998). An overall score ranging from -1 (negative RF, evident as a refusal to mentalize or a hostile stance towards mentalizing) to 9 (exceptional RF, evident as an ability to mentalize complex interactive phenomena and

contradictory or painful experiences) is given. The scale midpoint 5 represents definite or ordinary RF, where references to mental states are explicit and their connections to behaviour and interactions are considered.

Risk features in caregiving representations. The first author who has training and expertise in the background theories as well as in the coding systems identified Insecure, Hostile/Helpless, and Pre-mentalizing representational features from the psychotherapy notes with three separate rounds of theory-guided (deductive) content analysis (see e.g. Elo & Kyngäs, 2007; Neuendorf, 2016). Kati's reflections on herself as a mother, Paavo, and their relationship were considered to instantiate her caregiving representations and were defined as units of analysis.

The units of analysis were categorised, when applicable, using the following criteria for Insecure representational features. Criteria for identifying instances of text as Dismissing included idealization, insistence upon lack of memory, derogation of the infant's needs or attachment in general, remoteness from experience, and descriptions of oneself or the infant as strong, independent or normal. The criteria for identifying instances as Preoccupied included descriptions of sense of self/identity being tied to experiences with the infant, difficulty in forming a subjective caregiver's point of view, excessive blaming of self and/or the infant, "mind-reading", linguistic mix-ups between self and child, and preoccupying affects of anger or fear. The criteria for identifying instances as Disorganized[2] included psychologically confused thought (disoriented, dissociated, unrealistic views of causality, feelings of being haunted/cursed, confusion between self and child), speech (sudden change in speech pattern, invasion of disorganized speech onto other topics) and extreme behavioural responses to caregiving. The identification of Disorganized representations was not restricted to discussions of loss and trauma experiences.

The following criteria were used to identify instances as Hostile/Helpless: description of oneself or the infant as hostile, helpless or fearful; a pervasive sense of oneself or the child as bad or

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[2]The term "Disorganised" rather than "Unresolved/Disorganised" is used, because coding in the caregiving representations was not limited to specific experiences that would remain unresolved.

worthless; and unintegration of caregiving representations onto self-narrative (e.g. inability to think or describe caregiving experiences; unsolvable/undetected contradictions; lack of agency in relation to experiences; activation of overwhelmingly painful emotions when thinking about caregiving and the relationship to the infant).

Instances were identified as mentalization failures when they met the following criteria for Pre-mentalizing modes (according to definitions by Allen et al. 2008; Bateman & Fonagy, 2012; Fonagy et al., 1998; Luyten, Mayes, Nijssens, & Fonagy, 2017; Slade, Bernbach, Grienenberger, Levy, & Locker, 2005). For Psychic equivalence, the criteria involved equating mental states with reality and experiencing the world according to one's mental states. For the Teleological mode, the criteria included focusing solely on behaviour or appearance and recognising mental states as real only when they were manifested as actions. Finally, for Pretend mode, the criteria included speaking about mental states without a connection to subjective experience or observations about others.

The predefined theoretical concepts guided the formation of the main categories. Following this, the subcategories were formed in a data-driven way by placing thematically similar instances in the same subcategory and naming the subcategories according to the common features of the instances. Thus, the subcategories are indicative of how the predefined representational risks manifested in this particular text. A method of constant comparison (see e.g. Boeije, 2002) was applied to ensure the coherence of the classification: an instance was compared to all the other instances in a candidate main category and subcategory, as well as to those in another candidate category and subcategory, to determine the best-fitting classification. The instances were also constantly compared to theory to determine whether they should be included or excluded (Mayring, 2014).

The second author inspected the categorization independently at different points of the analysis, and the first and the second authors met regularly to critically discuss and refine the

classification. In addition, to enhance the trustworthiness of the classification, the first author initially categorized the first 50% of the data and used the established categorisation system in analysing the second half of the data. In all of the three analyses, all units of analysis from the second half of the data fitted into the established categories, indicating that the analysis was saturated. The final categorization of the caregiving representations is available from the first author upon request.

Results

Common Risk Features in Attachment and Caregiving Representations

Insecure representations. Table 1 summarizes the categorization of Kati's caregiving representations, their similarities to and differences from risk features in the attachment representations, and provides examples of instances classified to the categories. Both Kati's attachment and caregiving representations were characterized by Preoccupied and, to some extent, Disorganized features. Instances fitting the Dismissing criteria were not found. The attachment representations were classified as "Fearfully Preoccupied with (possibly traumatic) events", as unreal, almost dream-like fearful states occasionally occupied Kati's mind. Similar diffuse fears were found in Kati's caregiving representations: she spoke of a fear that something bad could happen at any moment to her as a mother or in the development of Paavo. However, as the fears were clearly unrealistic and unconnected to a source, these instances were categorized as Disorganized, rather than Preoccupied, caregiving representations.

Kati's Preoccupation or enmeshment with her attachment figures came across as difficulty in expressing her subjective point of view. Kati's answers were long, confusing and indecisive, and she used psychological expressions. Kati also made some "knowing" statements of her mother's intentions that reflected an undifferentiated view of herself and her mother. Lastly, rather than

considering her parents' reasons for behaving as they had done, Kati excessively blamed herself for difficulties in their relationship.

Kati had similar difficulties in expressing or owning her view as caregiver: she often stated that negative thoughts and feelings of caregiving were unacceptable, that parental decision-making was unsolvably difficult, and that she needed other people's assurance to hold the view of Paavo as good enough. Instances of Kati's undifferentiated view of herself and Paavo were also found. In them, Kati expressed that when Paavo showed neutral or negative emotions or oriented away from her, she thought that he disliked her or that she was unimportant to him. Finally, unbalanced blaming also appeared in Kati's caregiving representations towards both herself and Paavo: overwhelming guilt for not being a perfect mother or for that she could be harmful to Paavo, and dissatisfaction towards Paavo's undesirable characteristics such as expressing negative emotions or being shy in social situations.

The Disorganized features that were found from Kati's attachment representations were not substantial enough to lead to a classification. A theme of a relative's death invaded Kati's speech of other topics, and she expressed a belief that a "curse" on her childhood family would explain some difficult experiences. As a caregiver, Kati similarly expressed that she and Paavo were somehow cursed or haunted. Such thoughts were often accompanied by fears that something bad would happen, which are described further under the next paragraph about Hostile/Helpless representations.

[Table 1 around here]

Hostile/Helpless representations. Kati's attachment representations were classified as predominantly Fearful/Helpless, and such features were also central characteristics of her caregiving representations. In addition, features of Hostility and a sense of Badness/Worthlessness

were found from both the attachment and the caregiving representations. It is noteworthy that in the caregiving representations, the Hostile/Helpless instances were more prevalent than the Insecure or Pre-mentalizing instances.

Much like the Preoccupied classification, the Hostile/Helpless system also identified Fearfulness that was unconnected to a source as a key risk feature in Kati's attachment representations. Kati spoke of her mother as fearful and anxious, which suggests that her diffuse fearfulness is an internalization of her mother's and their relationships' fearful and helpless aspects. Unspecified Fearful instances were also found from Kati's caregiving representations: Kati spoke about hyper-alert scanning of Paavo in search of risks, inferring that something was wrong with him from questions or comments made about him, or believing that she could receive a (cosmic) "punishment" for not being a perfect mother. Interestingly, a specific fear of individuation was also found from both Kati's attachment and caregiving representations. Kati spoke of a fear that her growing up would be dangerous for her parents. In relation to Paavo, Kati told fearing that if she discontinued breastfeeding, Paavo would no longer love her.

Kati's representations of being in a relationship with her father were characterized by hostility and criticism. The caregiving representations included instances where Kati experienced Paavo as critical and disapproving, alike her father. Such a view was catalyzed especially when Paavo showed neutral, ambiguous, or negative expressions, or when he oriented away from Kati. More rarely, Kati showed identification with her father's Hostility by describing Paavo in a critical way as dull, ugly, or more difficult than other children. Such thoughts were highly distressing for Kati and she spoke of wishing not to have them.

Lastly, Kati expressed a pervasive sense of Badness/Worthlesness in her attachment representations in blaming herself and repeatedly laughing at her own distress as a child. These features imply that she had internalized her father's hostile and critical stance towards herself. In the caregiving representations, Kati frequently described both Paavo and herself as Bad/Worthless.

In fact, such instances were found more often than Fearful, Hostile, or Helpless instances, and they were classified as their own main category. Kati described experiencing that Paavo's characteristics, such as cautiousness or dissatisfaction, were bad or not right; that she was a wrong kind of a mother when being herself or not being flawless; and that others were constantly criticizing Paavo.

Mentalizing failures. Instances of Pretend mode characterized Kati's thinking of both her attachment and caregiving representations. However, in her attachment representations, the primary finding was Kati's advanced ability to reflect on even complex and painful relational experiences with her parents in terms of the underlying mental states, which was scored as a seven on the nine-point scale. However, Kati's mentalizing ability rapidly fluctuated with lapses into the Pretend mode. These lapses did not, however, cancel out the authentic instances of mentalizing. In the caregiving representations, lapses into the Pretend mode predominated long periods of Kati's speech and occurred more often than other Pre-mentalizing modes that are described in the next section.

Pretend mode in both the attachment and the caregiving representations was manifested, first, as pseudomentalizing. At times, Kati talked about her experiences with her parents in a theoretical, general, diffuse or psycho-babbling manner. The answers were often highly sophisticated, and it took effort from the coder to distinguish Pretend mode from actual mentalizing. In the caregiving representations, rather than reflecting on her subjective experience of motherhood or Paavo's inner experience, Kati became stuck in pre-fixed views of how she should be as a mother, how others perceived Paavo, or the theoretical reasons for not quitting breastfeeding, a process that she experienced as difficult.

Second, Pretend mode came across in Kati's hypermentalizing or intrusive descriptions of her mother's intentions. Similar "mind-reading" instances were found from Kati's caregiving representations. Kati often interpreted Paavo's intentions in a self-referential way: that his neutral

and negative expressions communicated dissatisfaction towards her, and that he would experience similar sibling rivalry towards the new baby that she had felt as a child. Further, Kati expressed "knowing" that others were thinking critically of Paavo.

Lastly, Kati's attachment representations showed some bizarre and unrealistic features, particularly when she talked about being scared or worried as a child. Resembling these, we found Pretend mode instances from Kati's caregiving representations that were distorted or detached from reality testing. When Kati tried to reflect on mental states behind Paavo's behaviour or on the influence she had on him, she at times spoke of thinking that Paavo's negative expressions could indicate severe psychopathology, or about experiencing excessive guilt and unrealistic worries about how her single actions could compromise Paavo's development.

Risk Features Specific to the Caregiving Representations

Insecure representations. The Preoccupied and Disorganized instances in Kati's caregiving representations were both characterized by a more severe lack of differentiation than what was found in her attachment representations. Further, Kati's Preoccupied caregiving representations showed some Disorganized features. These findings imply that the Preoccupied and Disorganized caregiving instances form a continuum from notable to extreme representational risk, rather than reflect qualitatively distinctive states of mind.

In the Preoccupying instances of blaming Paavo, Kati ascribed him the same negative characteristics of which she had been criticized as a child: most pronouncedly, Kati talked about finding his social cautiousness and expressions of negative affect difficult. Despite having told of the criticism toward herself, Kati did not reflect upon the similar view she had of herself and Paavo, but instead talked about his shortcomings in a matter-of-fact manner. Kati's expressions of excessive guilt, then, entailed Disorganized features of viewing herself as *causal* for Paavo's negative emotions. Further, the blaming of both herself *and* Paavo fits poorly with the definition of Preoccupied oscillation between different points of view: more than drifting indecisively between

views, Kati simultaneously held a view of both herself and Paavo as blameworthy. This differs from the organised, albeit problematic, strategy of self-blaming that characterized Kati's attachment representations.

Disorganization was more prevalent and pronounced in Kati's caregiving representations than in the attachment representations. Rather than indexing a lack of differentiation (view of herself and Paavo as similar), the Disorganized instances were characterized by Kati's merging representation of herself and Paavo (view of herself and Paavo as the same). In these, Kati expressed that others criticized Paavo of *her* childhood unwanted characteristics. Furhter, Kati spoke of hoping that Paavo would always please her parents because of her need for their approval. There were also instances that reflected Kati's difficulty to hold boundaries between her and Paavo's minds: for example, that her mental health problems or meditating would transmit to Paavo somehow directly. Lastly, Kati made some role-confused statements where Paavo was to take the responsibility of quitting breastfeeding or spoke of seeking comfort from him. In addition to these merging instances, we also found Disorganized instances where Kati communicated specific fears. They are described under Hostile/Helpless representations.

Hostile/Helpless representations. Parallel to the Preoccupied blaming of herself and Paavo, Kati communicated a view of both herself and Paavo as Bad/Worthless. This differed from the attachment representations, where such a view of herself, but not of her parents, was found. As stated above, Kati described similar characteristics in Paavo as wrong or unwanted that she had been criticized of as a child.

The caregiving representations entailed some specific and concrete fears that differed from the mostly diffuse Fearfulness of the attachment representations. Kati feared, for example, that Paavo would develop an antisocial personality disorder or fall seriously ill from a sting of a mosquito. Kati also spoke of fearing that her essential badness or mental health problems would inevitably harm Paavo. Lastly, opposite to the fear of individuation that was found from both the

attachment and caregiving representations, Kati also expressed fearing excessive closeness to Paavo: feeling like she could lose her boundaries during pregnancy or postnatally, becoming too clingy onto him.

Regarding Hostility, Kati communicated a fear of her own Hostility only in the caregiving representations. These were, in fanct, the most prevalent of the Hostile caregiving instances. The instances were categorized as Hostile rather than Fearful, as the primary affect was deemed that of aggression. Kati associated the rise of any negative, annoyed, or angry feeling in herself, as well as the responsibility to set limits for Paavo, with being hostile towards him. Kati spoke of fearing that negative affects would automatically lead to her being unpredictably angry like her father or to her wanting to abdicate from caregiving altogether.

In the Helpless instances that were particular to caregiving, Kati expressed a lack of power, means, or knowing what to do in relation to Paavo, rather than general anxiety that characterized the internalization of her mother's Helplessness. Kati expressed such a sense of powerlessness and victimhood especially in limit-setting and structuring situations. In these, restricting breastfeeding was a recurrent theme. Kati also spoke of giving up beforehand when anticipating power struggles. Lastly, in some of the Helpless instances, Kati explicitly stated that Paavo, not her, had the power to decide what happened.

Mentalizing failures. Kati's lapses into the Pre-mentalizing modes were more varying, frequent, and pronounced in the caregiving representations than in the attachment representations. Instances fitting to all three Pre-mentalizing categories of the Pretend and Teleological modes and Psychic equivalence were found, and they were present at almost every psychotherapy session. The Teleological instances were characterized by Kati's expressions where her worth and essence as a mother and those of Paavo were determined by appearance and behaviour. Kati spoke of believing that only beautiful mothers are lovable and that only by breastfeeding could she remain important to Paavo. At times, Kati failed to consider Paavo's experiences behind his negative expressions and

her own role in regulating them, and instead spoke of difficulty as his stable characteristic. Further, Kati spoke of needing objective "proof" that Paavo was in fact good, such as extraordinary growth or constant praising from others.

In the Psychic equivalence instances, Kati described experiencing the outside world according to her fearful, anxious, or depressed mental states. The Psychic equivalence instances typically occurred in tandem with Kati's recalling of burdening and emotional stress, and describing them often made her more distressed. Kati spoke of believing that her negative thoughts of Paavo, experience of herself as bad, and her fears would be real in the world and shared by others. In addition, she spoke of how her thinking and mental health symptoms could directly influence Paavo's development. Finally, Kati expressed that having any negative thoughts of Paavo would automatically be harmful to her parenting or to him.

The Coincidence of Different Risk Features in the Caregiving Representations

Insecure representations. Figure 1 illustrates the extent to which the Preoccupied and Disorganized instances found in Kati's caregiving representations were also classified as Hostile/Helpless or Pre-mentalizing. Nine out of 10 of the instances categorized as Preoccupied also received a Hostile/Helpless categorization. Most often, Kati showed preoccupation while describing herself or Paavo as Bad/Worthless. The Preoccupied classification also coincided with Pre-mentalizing in eight out of 10 instances, with Pretend mode being the most common co-occurring category.

Disorganization also co-occurred with the Hostile/Helpless classification frequently, in eight out of 10 instances, with Fearfulness and Badness/Worthlessness being the most common coinciding subcategorizations. In 77% of the Disorganized instances, a co-categorisation of Pre-mentalizing was also assigned, with Psychic equivalence being the most common coinciding subcategorization.

[insert Figure 1 around here]

Hostile/Helpless representations. The extent to which the Bad/Worthless, Fearful, Hostile and Helpless category placements co-occurred with the Insecure and Pre-mentalizing categorizations is illustrated in Figure 2. When a Bad/Worthless, Fearful and Hostile categorization was given, more than nine out of 10 of the instances also met the criteria for Pre-mentalizing. Kati's representations of herself and of Paavo as Bad/Worthless most often reflected also a lapse into the Teleological and Pretend modes, and the Fearful instances typically co-occurred with Psychic equivalence. Instances that were categorized as Hostile commonly co-occurred with both Pretend mode and Psychic equivalence, the latter coinciding especially with Kati's fear of Hostility. In contrast to the three other Hostile/Helpless subcategories, the Helpless instances mostly occurred independently from the Prementalizing modes. Only Pretend mode coincided with about one fifth of the Helpless instances.

About six to seven instances out of 10 that were categorized as Bad/Worthless, Hostile, or Helpless also fit into the Insecure categories, with placement in the Preoccupying subcategory being the most typical co-assignment. Fearfulness occurred more independently, receiving an Insecure co-categorization in less than 50% of instances, the subcategory being most often Disorganized.

[insert Figure 2 around here]

Prementalising modes. The coincidences of the Pretend, Teleological, or Psychical equivalence mode categorization with the Insecure and Hostile/Helpless categorisations are illustrated in Figure 3. Almost always when Kati lapsed into Prementalizing, Hostile/Helpless representational content was found. However, while the Bad/Worthless, Fearful, and Hostile categorisations were often co-assigned to the Pre-mentalizing instances, they only rarely coincided

with Helplessness. Both Teleological and Pretend mode instances most often showed Bad/Worthless representational content, in seven out of 10 instances in the former and four out of 10 instances in the latter. The Psychic equivalence classification coincided with the Fearful categorization in more than 50% of instances and with Hostility in more than 30% of instances.

The Pre-mentalizing instances were given an Insecure classification in more than six out of 10 of the cases. While over half of the Pretend mode and Teleological instances also received a Preoccupied categorisation, almost half of the Psychic equivalence instances were also assigned the Disorganised category.

[Insert Figure 3 around here]

Discussion

By exploring the risk features in a mother's attachment representations using the AAI and caregiving representations as expressed in parent–infant psychotherapy, we found remarkable similarities but also specific differences. Both the attachment and caregiving representations were characterized by Preoccupation that was evident as self-other undifferentiation and a weak sense of self, as well as Disorganized elements of being cursed. The affect that characteristically preoccupied Kati's mind was over-aroused Fearfulness; however, Hostile, Helpless and Bad/Worthless representations were also found from both the attachment and caregiving representations.

Specifically in Kati's caregiving representations, the undifferentiation at times deepened into a disorganized, merged working model of herself and Paavo. The finding concurs with previous results of merger as a key risk feature in attachment traumatized mothers' caregiving representations (George & Solomon, 2011; Levendosky, Bogat, & Huth-Bocks, 2011). In the current study, Kati confused her own and Paavo's roles and viewed them both as similarly

blameworthy or as bad/worthless. Kati's caregiving representations were further specifically characterized by concrete and specific fears and helplessness, as well as by a fear of her own Hostility. In addition, Kati's mentalizing ability was more susceptible to breaking down when speaking about her caregiving than her attachment representations. These lapses into Pre-mentalizing modes usually coincided with problematic caregiving representations.

The Hostile/Helpless theory's notion of an unintegrated nature of dysregulating representations appears central in explaining both the similarities and differences in Kati's attachment and caregiving representations. Kati's Fearful, Preoccupied/enmeshed, rejected/criticized by others, and Bad/Worthless representations of herself as a mother echoed the working models she had formed in relation to her parents. The unintegrated nature of the attachment representations may have prevented her from constructing a maternal identity that was distinct from her attachment experiences (Terry, 2018). In tandem, the caregiving role evoked similar, Bad/Worthless representations of Paavo in Kati, as well as taking a blaming and to an extent hostile stance towards him. This likely reflects Kati's unconscious identification with the problematic sides of her caregivers (Lyons-Ruth & Melnick, 2004; Lyons-Ruth et al., 2005). As a caregiver, Kati held onto both the problematic view of herself and that of Paavo, and she confused the two at times with each other.

The finding that Kati's Preoccupied representational features occurred together with Disorganized indicators concurs with earlier research postulating that attachment-related phenomena are better understood as falling into a continuum rather than constituting distinctive categories (Fraley & Spieker, 2003; Roisman, Fraley, & Belsky, 2005) and that Preoccupied and Disorganized representations reflect similar underlying mental phenomena (Haltigan et al., 2014). The result thus strengthens the view that not only Disorganized, but also Preoccupied, maternal representations indicate a severe risk for dysregulating mother–infant relationships. The current

study contributes to prior knowledge by showing that Preoccupied and Disorganized representational features were particularly similar in Kati's caregiving representations.

Despite reflecting unintegrated Hostile/Helpless states of mind, Kati's Fearful attachment representations were classified as Preoccupied. However, this might reflect the incompleteness of the secure/insecure coding system more than the actual nature of the Fearful representations (see e.g. Main et al., 2003). Re-activation of Fearfulness at the wake of attachment representations indicates a history of overwhelming or traumatic relational experiences to which the individual has been unable to develop coping strategies (Hesse & Main, 2000; Lyons-Ruth et al., 2006; Schuder & Lyons-Ruth, 2004). As such, they poorly fit the concept of an organized representational strategy. This was noted in categorizing Kati's caregiving-related out-of-proportion and disconnected fears as Disorganized rather than Preoccupied. However, as the classification of Disorganized caregiving representations was not restricted to single losses or traumas, it overlaps considerably with the broader Hostile/Helpless definition of Fearfulness.

Kati's caregiving-specific Fearfulness took the form of experiences of concrete and omnipresent rather than diffuse threats. Caregiving requires a mother to be constantly alert to detect dangers to her infant's safety (e.g. Rallis, Skouteris, McCabe, & Milgrom, 2014). In mothers such as Kati who have not developed adaptive stress and emotion regulation abilities in their early relationships, such high arousal might signal that the family's day-to-day living environment is filled with constant threats.

Resembling the Fearful caregiving representations, the Helplessness that Kati experienced as a caregiver was tied to everyday interactions with Paavo. In them, Kati expressed powerlessness and a lack of means, especially in structuring and limit-setting situations with Paavo. It seems likely that the demand to be in charge was associated with Hostility in Kati's mind. Kati's fear of her own Hostility that was particular to the caregiving representations supports this assumption. Indeed, the

earlier literature describes Helpless and Hostile relational templates as co-existing and promoting of each other (e.g. Lyons-Ruth et al., 2005; Lyons-Ruth & Spielman, 2004).

The different contexts for evaluating the attachment and caregiving representations need to be considered in interpreting the findings. Kati's caregiving representations may have shown more severe undifferentiation and clearer instances of Disorganization because they were assessed from stress- and emotion-eliciting situations in psychotherapy and with Paavo, whereas the attachment representations were assessed from a structured interview situation. Kati's greater susceptibility to lapse into Pre-mentalizing in her caregiving representations raises the same question: was Kati's better ability to mentalize her attachment experiences at least partly a product of the lower-stress interview situation? A further notion is that as the AAI was conducted in the end rather than in the beginning of the psychotherapy process, the somewhat less problematic attachment representations and the mentalizing ability may partly reflect treatment outcomes. This considered, our results suggest that assessment in naturalistic rather than structured or laboratory contexts captures a more authentic level of parental representational risk.

The co-occurrence analysis of Kati's caregiving representations showed that problematic working models of herself and of Paavo usually coincided with the Pre-mentalizing modes. The finding fits the notion that at their activation, problematic representations disturb a mother's self-regulation capacity and thus her ability to mentalize (George & Solomon, 2008; Sleed, 2013). Our findings deepen the understanding of the specific representational risks that occur together with particular Pre-mentalizing modes. For clinical practitioners, this is more telling than the assessment of parents' general level of reflective functioning. In Kati's case, the Preoccupied views of herself and of Paavo as Bad/Worthless or Hostile were often given in Pretend mode. Views of herself or Paavo as Bad/Worthless also reflected a teleological concentration on behaviour only. Kati's recollection of her fears, including the fear of being hostile, most often indexed also a Disorganized and Psychic equivalence breakdown in reasoning.

The co-occurrence analysis further showed that the Hostile/Helpless conceptualization was the most comprehensive of the three theoretical systems in covering all the risk features in the caregiving representations. As Hostile/Helpless instances were also the most prevalent risks found in Kati's caregiving representaitons, our results concur with the previously presented view that Bad/Worthless, Fearful, Hostile, and Helpless features are key risks in interpersonally traumatized mothers' representations (e.g. Finger, 2006; Lyons-Ruth et al., 2005). Our study showed that this holds not only for attachment, but also for caregiving representations.

The co-occurrence analysis also offers new information about the relations and scope of the different theoretical concepts. First, Kati communicated a wider range of Fearful representations than what was detected with the Disorganized criteria. This strengthens the view that the Disorganized conceptualization, developed to spot states of mind related to single losses and trauma, does not fully capture representations born out of dysregulated attachment relationships. Second, Kati's Helpless caregiving representations only rarely indexed a lapse into a Pre-mentalizing mode. We argue that helplessness might index a caregiving-specific failure in mentalizing that the pre-defined criteria did not capture. In order for parental reflective functioning to be succesful, it must help her in regulating her infant (Slade et al., 2005) Although Kati accurtely mentalized her helpless mental states, she failed to consider what Paavo needed from her as a parent.

Strengths and Limitations of the Study

The first author's role as both the researcher and the psychotherapist represents both strengths and limitations in the study. On the other hand, her relationship with Kati and Paavo allowed her to take an interest in the representations that were manifested in the psychotherapy sessions; on the other hand, the therapist's role disposed the data analysis to ad-hoc "knowledge" what was searched. We strived for objectivity with the second author's external analysis of the material and with scrutiny in sticking to the predefined theoretical framework. Conducting the AAI at the end of the

psychotherapy process rather than at the beginning poses limitations, because the mother's and the psychotherapist/interviewer's relationship could have influenced the responses.

The nature of the case study poses obvious limitations to the generalization of the results. However, with the qualitative and naturalistic data, it was possible to validate that the theory-imposed phenomena are also central in clinical settings (see also Baradon & Bronfman, 2010), as well as to deepen the understanding of the specific ways they are manifested.

Clinical Implications and Directions for Future Research

The case study suggests that assessment and treatment of parent–infant dyads, where the parent has a history of dysregulating attachments, must consider several specific points. An understanding of the attachment roots of parents' problematic representations is needed, but spotting their specific manifestations in current caregiving likely makes the most difference for the dyadic relationship and for infant development. Screening for Hostile/Helpless, as well as undifferentiated views of oneself and one's child are pivotal. Currently, there are comprehensive assessment systems as well as screening tools to spot such risks from caregiving representations (e.g. Crawford & Benoit, 2009; Huth-Bocks, Guyon-Harris, Calvert, Scott, & Alfs-Dunn, 2016; Sleed, 2013;Young et al., 2018).

The finding that caregiving risk features can be spotted in their full spectrum from the naturalistic setting of parent–infant psychotherapy is important. Targeting interventions at them is key in preventing the consolidation of maladaptive interaction patterns and preventing psychopathologies in children (Lyons-Ruth, Melnick, Bronfman, Sherry, & Llanas, 2004; LeCompte & Moss, 2014). The results of the current study suggest that the more subtle transmitters of "hidden trauma"—maternal helplessness and fearfulness—are distinct from other risks, and they can and should be identified early on. However, our finding that the problematic representations coincided with the Pre-mentalizing modes suggests that it is pivotal to restore a mother's mentalizing ability first, in order to then work with her representations. Specific techniques

focused on promoting parents' mentalizing have been successfully applied to families with infants previously (e.g. Nijssens, Luyten, & Bales, 2012).

Further research is needed to compare risks in attachment and caregiving representations from similar data, as well as to assess the cause–effect relations between risk features in caregiving representations and mentalization failures. Failures that are specific to *parental* mentalizing, such as helplessness suggested in this study, need to be investigated further. Rsearch is needed on the manifestations of Hostile/Helpless mental states already during pregnancy to guide early preventive interventions (for preliminary results, see Terry, 2018). As fathers and other caregivers' role in infants' development and in interventions is important, future work is needed to explore their caregiving representations.

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Table 1

Categories of Risk in the Mother's Caregiving Representations

Categories of Risk	Main Content of Instances	Comparison to Attachment Representations Similarities
1 INSECURE[a]		
1.1 Preoccupied	Kati's preoccupation with worries and negative emotions when thinking about caregiving: excessive blaming of self and child, anxious and depressed thoughts of unimportance when Paavo expressed negative emotion or oriented away, and undecisive, non-accepting stance towards own thoughts about caregiving and Paavo.	Difficulty forming subjective point of view; sense of self is tied to relationship; unbalanced blaming.
1.1.a Blaming the child	Kati's statements where Paavo's shyness and negative emotions were unpleasant and difficult for her; expressions that others would dislike Paavo because of these qualities; wishes that Paavo would be different, like "other happy children"; failure in considering her own role in Paavo's stress and emotion regulation.	
1.1.b Difficulty forming subjective view	Kati's expressions of non-reflective uncertainty or unfamiliarity in views of Paavo and of caregiving; unsolvable difficulties in making decisions about structuring and limit-setting; expressions of her own negative feelings as unacceptable; needing constant reassurance from others to hold a positive view of Paavo.	
1.1.c Excessive guilt	Kati's overbearing guilt for not being able to do everything right all the time; feeling causal for all the potential mishaps that could happen to Paavo; guilt for being possibly harmful for Paavo.	
1.1.d Experience tied to infant expressions	Kati's anxiety and a belief that Paavo did not like her when he expressed neutral or negative emotions; feelings of unimportance when Paavo oriented away; needing Paavo to show affection and cling onto her to proof she was important.	
1.2 Disorganized	Kati's disorientation in thinking about herself as a caregiver and Paavo as a child; confusion in mental boundaries between herself and Paavo; and verbalizations of thought that seem detached from realities in their fearful, dream-like, or magical quality.	A diffuse feeling of her family being cursed characterized both Kati's attachment and caregiving representations, accompanied by fears[b].
1.2.a Confusion between self and child	Kati's experiences that others criticized Paavo for her unwanted childhood characteristics; wanting Paavo to please her parents because of her own need of approval; beliefs that she and Paavo could access each other's mental states directly, such as her "taking away" his hurt feelings or him "seeing" her badness; seeking security and comfort from Paavo	

1.2.b Feelings of being cursed	Kati's hypervigilant scanning for signs that something bad can happen to Paavo; anticipating a "cosmic punishment" for not being happy/satisfied as a mother all the time.	

2. HOSTILE/HELPLESS

2.1 Bad/Worthless	Kati's pervasive sense of shame, being bad, or the wrong kind as a mother, or regarding Paavo. Kati did not recognize such views as subjective evaluations but instead spoke about them as objective realities. Bad/Worthless incidents occurred especially when Kati compared herself and Paavo to others or when she thought about how others perceived herself and Paavo.	Kati's descriptions of herself as unworthy and wrong that occurred especially when others were perceived as critical and disapproval.
2.1.a The child's characteristics are bad	Kati's beliefs that Paavo would be discriminated because he is shy, cautious, or showing negative affect; hoping that Paavo would be more radiant and happy; difficulties in believing that Paavo is good when he was not "the cutest" or developing exceptionally well.	
2.1.b Being the wrong kind of a mother	Kati's sense of badness born of acknowledgement that being a perfect mother is not possible; beliefs that a mother should be miraculous or beautiful in order for children to love her; sense of badness when negative emotions were evoked; interpreting Paavo's dissatisfaction or orienting away as signs of failing in taking care of him; expressions that being herself is harmful for Paavo.	
2.1.c Other people critisize the child	Kati's interpretations that comments (e.g. whether Paavo was shy) or questions (e.g. about his development) are criticizing the child; experiencing others as judging Paavo when they were not praising him; interpreting that others perceived Paavo as dull when he was slow to warm up or cautious.	
2.2 Fearful	Descriptions of over-aroused, fearful states that occupied Kati's mind. The fears were unrealistic, out-of-proportion and not grounded on real threats. They concerned Paavo's wellbeing or Kati being harmful to him, and were evoked by the close relationship with him.	Kati's diffuse fearfulness and anxiety when speaking about her relationship to her parents and in the caregiving role; specific fears related to growing up/ differentiation.
2.2.a Something's wrong with the child	Kati's anxiety about not-knowing whether Paavo's development will go well; scanning for signs of sickness, developmental problems, or personality pathology in Paavo; fearfulness about Paavo's safety when left with a nanny, or when hearing about accidents and crimes from news.	
2.2.b Mother's problems will harm the child	Kati's fears that her core beliefs of being bad, "bad karma", or mental health problems will harm Paavo, and that they would transmit inevitably and "directly" rather than e.g. via caregiving behaviour.	

2.2.c How to remain close but separate?	Kati's fears that restricting breastfeeding at toddlerhood would make Kati unimportant to Paavo; of losing one's identity and boundaries if gaining weight during pregnancy; that without another child, she might cling onto Paavo excessively.	
2.3 Hostile	Kati's descriptions of herself or Paavo as rejecting, punitive, or aggressive; statements where she equates her feelings of dissatisfaction, irritation, or mild anger to being unpredictably hostile.	Kati's view of her father as hostile, critical and rejecting; similar view of Paavo towards herself, and more rarely, of herself toward Paavo.
2.3.a Fear of being hostile	Kati's fear that anger or irritation evoked by Paavo or the parental role would automatically lead to angry outbursts; equating limit-setting and saying no to sadism and teasing; fearing to find herself globally disliking Paavo or parenting.	
2.3.b The child rejects the mother	Kati's interpretations that Paavo's frustrated or negative expressions were caused by or targeted at her; beliefs Paavo's neutral/unambiguous expressions were hidden critique towards her; experiences that Paavo's interest in his father was active rejection of her.	
2.3.c The mother dislikes the child	Kati's unwanted thoughts of not liking Paavo or parenthood; experiencing Paavo as more difficult than other children, unattractive, or dull; dissatisfaction that Paavo was not a calm baby despite Kati's self-directed efforts like meditation during pregnancy.	
2.4 Helpless	Kati's expressions of powerlessness, not knowing what to do in the caregiving role, wanting Paavo to decide, or becoming de-activated rather than trying out solutions when facing challenging situations with Paavo.	Descriptions of both own mother and herself as anxious and helpless in the caregiving role.
2.4.a Difficulty in structuring and limit-setting	Kati's experienced difficulty to set limits when Paavo wanted something, especially concerning breastfeeding; anticipating and avoiding power struggles (e.g. not feeding Paavo with a spoon when he might refuse it; not going to a park when it was difficult to leave); passivity/disbelief that trying something new would help in sleeping/ feeding difficulties.	
2.4.b The child decides	Kati's expressions where Paavo was in charge or involuntarily submitting to his will, especially in breastfeeding situations; statements of wanting Paavo to take the responsibility for limit-setting, e.g. reasoning with him why he should stop nursing.	

3. PRE-MENTALIZING

3.1 Pretend mode	Kati's speech of mental states that was detached from experiences or observations of others: predefined, theoretical, and unrealistic views of Kati's own, Paavo's, or others' intentions or how they "should be"; lengthy discussions that did not lead to Kati understanding herself or Paavo better or help the reader in understanding their experiences.	Theoretical, pre-fixed, and "knowing" descriptions of mental states; unrealistic/ distorted thinking about mental states

3.1.a Getting stuck in worry	Kati's fixed assumptions of how a mother should be and how she might be harmful for Paavo; worries that others will discriminate Paavo because of his shyness; citing literature when trying to make a decision about whether to stop breastfeeding.	
3.1.b Mind-reading	Kati's failures in acknowledging the opaqueness of minds; self-referential interpretations that Paavo's negative expressions communicated discontentment of her; interpreting others' attention to and speech about Paavo as criticism without evidence.	
3.1.c Distorted interpretations	Kati's speech about Paavo's mental states or her influence on him that lacked reality testing: that his seriousness was indicative of antisocial personality; that being with her would make him "bad"; that single things that she did would compromise Paavo's development.	
3.2 Teleological	Kati's concentration solely on her own or Paavo's behavior or appearance; determining her and Paavo's worth from external properties.	Teleological thinking did not characterize Kati's attachment representations.
3.2.a Equating the child with his undesired properties	Kati's descriptions where Paavo's unwanted behavior was seen as his characteristics and as determinants for his development; failures in considering how situational factors or her behavior constituted to Paavo's expressions; wishing that Paavo would be more like other "smiley" children.	
3.2.b Needing proof of the child's goodness	Kati's hope for an objective measure that could show everything was fine in Paavo's development (e.g. above average growth in well-baby clinic check-ups); expressions of needing others to constantly praise and complement Paavo.	
3.2.c Maternal goodess is determined externally	Kati's expressions that only beautiful or extraordinary mothers are beloved by their children; beliefs that only by continuing breastfeeding could she remain important to Paavo; experiences of unimportance when Paavo oriented away.	
3.3 Psychic equivalence	Kati's inability to reflect upon the representational nature of her states of mind, but instead experiencing them as realities in the world.	Lapses to psychic equivalence were not found from the attachment representations.
3.3.a Distressing reality	Kati's experiences of the world according to her anxious, distressed, or fearful mental states; thinking that others shared her belief that Paavo was bad that led to not wanting to show him to anyone; believing that Paavo disliked her when experiencing herself bad as a mother; anticipating that something bad would happen when feeling fearful.	

3.3.b Mother's mind affects the child directly	Kati's belief that not being too hopeful prenatally caused the adaptive course of pregnancy; statements that her "bad karma" and other mental properties could directly transmit to Paavo; expressing that meditating should have made Paavo a "zen" baby.
3.3.c Negative thoughts are dangerous	Kati's fear that having any negative thought would lead to abdication from caregiving; that it could be dangerous for Paavo if she did not feel content all the time; or that some kind of punishment could follow from discontenment.

Note. N refers to the prevalence of instances in given category found from the data. The classes are

presented in order of magnitude.

[a]Instances reflecting dismissing states of mind were not found.

[b]The fearfulness evident in the attachment representations was classified under preoccupation, but they are

conceptualized as re-emergence of overwhelming or traumatic experience.

Figure 1. The co-occurences of the Hostile/Helpless and the Pre-Mentalizing instances with the Insecure caregiving representations.
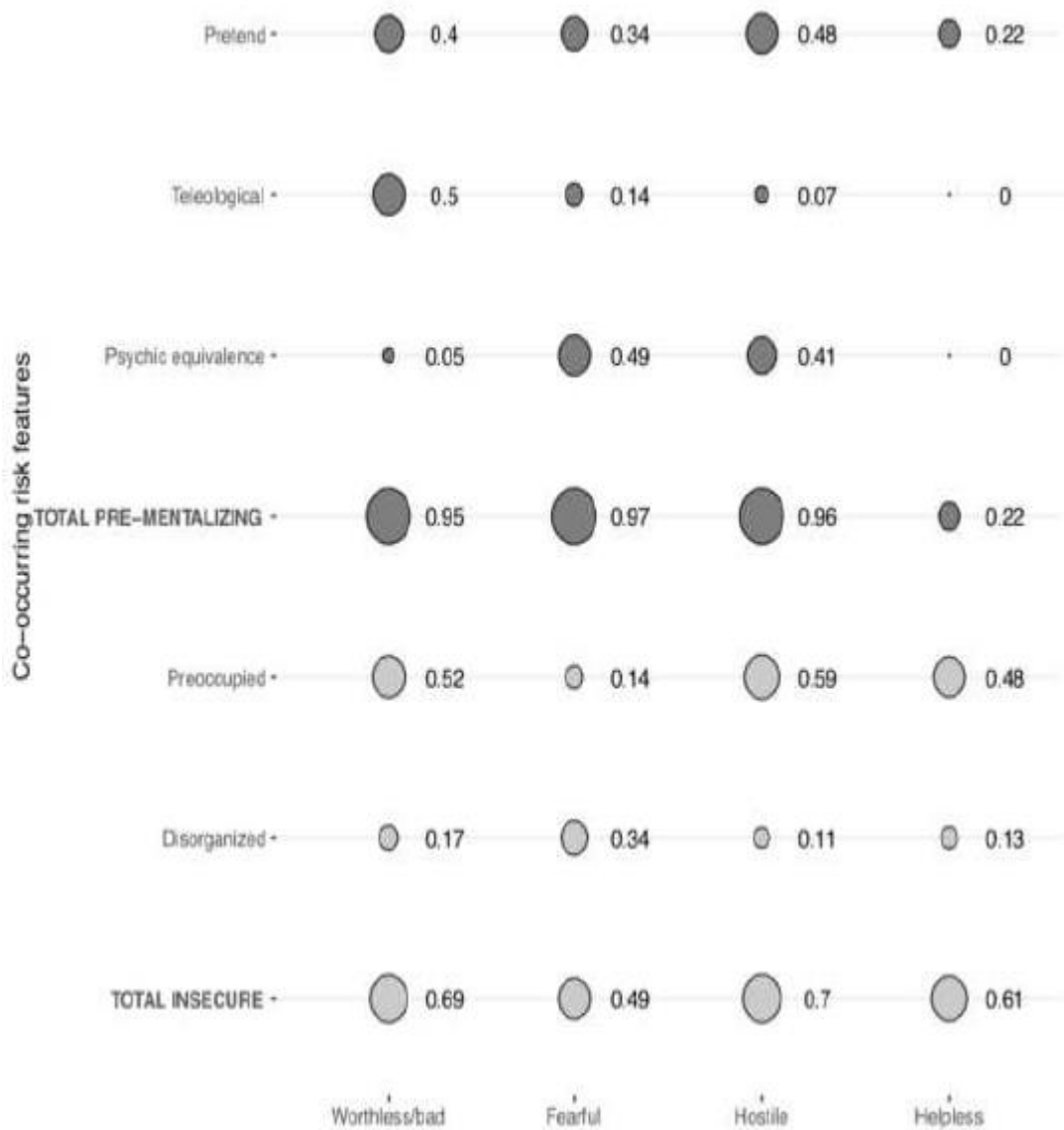
Figure 2. The co-occurences of the Insecure and the Pre-mentalizing instances with the Hostile/Helpless caregiving representations.
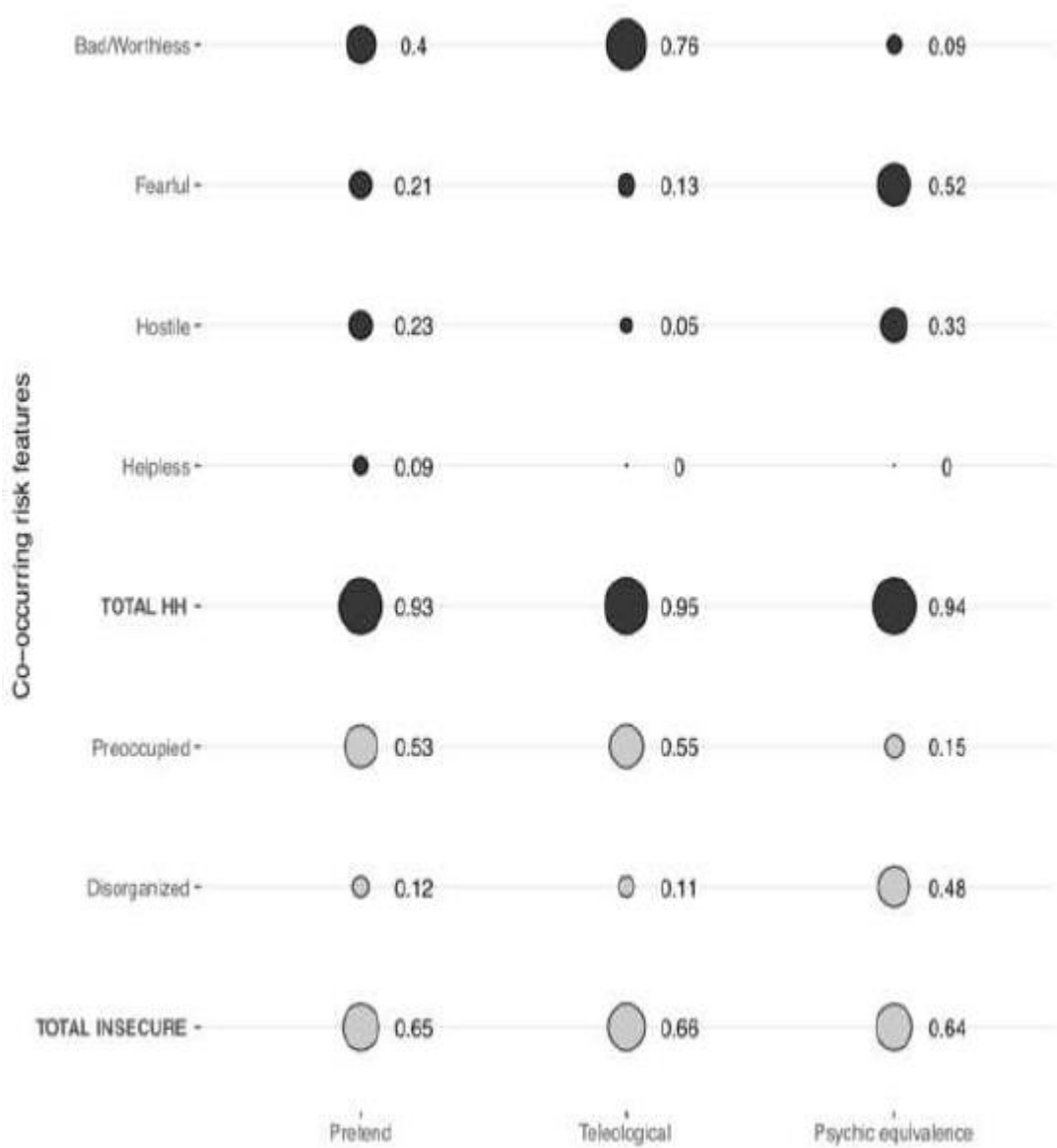
Figure 3. The co-occurences of the Insecure and the Hostile/Helpless instances with the Pre-Mentalizing modes in the caregiving representations.