Like grandparents, like parents: Empirical evidence and psychoanalytic thinking on the transmission of parenting styles

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Pietro De Carli, PhD
Angela Tagini, PhD
Diego Sarracino, PhD
Alessandra Santona, PhD
Valentina Bonalda
Paola Elena Cesari
Laura Parolin, PhD

The authors discuss the issue of intergenerational transmission of parenting from an empirical and psychoanalytic perspective. After presenting a framework to explain their conception of parenting, they describe intergenerational transmission of parenting as a key to interpreting and eventually changing parenting behaviors. Then they present (1) the empirical approach aimed at determining if there is actually a stability across generations that contributes to harsh parenting and eventually maltreatment and (2) the psychoanalytic thinking that seeks to explain the continuity in terms of representations and clinical phenomena. The authors also discuss the relationship between the attachment and the caregiving systems and hypothesize a common base for the two systems in childhood experience. Finally, they propose the psychoanalytic perspective as a fruitful theoretical framework to integrate the evidence for the neurophysiological mediators and moderators

The authors are with the Department of Psychology, University of Milano-Bicocca, Milano, Italy. Pietro De Carli is now also affiliated with the Department of Developmental and Social Psychology, University of Padova, Padova, Italy.
Correspondence may be sent to Pietro De Carli, Department of Developmental and Social Psychology, University of Padova, Via Venezia 8, 35131 Padova, Italy. E-mail: pietro.decarli@unipd.it or p.decarli@campus.unimib.it

of intergenerational transmission. Psychoanalytically informed research can provide clinically relevant insights and hypotheses to be tested. (Bulletin of the Menninger Clinic, 81[X], 2–25)

Parenting is the process of promoting and supporting the physical and emotional development of a child. More specifically, psychoanalytically informed theory and research have demonstrated the specific role of parenting in developing infants' psychic organization by means of the early intersubjective experience with the caregiver. The seminal works of Stern (1985), Trevarthen (1979), Sameroff and Emde (1989), and Tronick and Gianino (1986) showed children's early ability to communicate and interact socially. The child's self can be understood as the result of a co-constructed process (Schore, 2012) in which parents make sense of the child's experience.

It is of note that most psychoanalytic models have conceptualized the mother's contribution to structuring the child's mind, although the models may differ in the emphasis given and the terminology used. The theories include Sullivan's (1931) organism–environment complex within which a self is developed, Mahler, Pine, and Bergman's (1975/2008) "auxiliary ego," Bion's (1967) reverie, Winnicott's (1960b) description of holding, handling, and object-presenting, and Kohut's (1975) transmuting internalization of self–object functions. All of these theories imply that children are so deeply embedded in their social matrix and their development depends so highly on caregiving responsiveness that one needs to conceive of the child–caregiver system as a single unit. In Winnicott's (1965) famous words: "If maternal care is not good enough then the infant does not really come into existence, since there is no continuity of being; instead the personality becomes built on the basis of reactions to environmental impingement" (p. 54). From this perspective, parenting constitutes an all-encompassing ecology for development. Therefore, in-depth studies are necessary to understand the mechanisms that underlie the role parents have in turning their children into subjective individuals by co-creating their psychic organization. Even more importantly, these studies lead to an enhancement of models of intervention, which can prevent

or treat dysfunctional parenting and negative child outcomes. Paraphrasing Winnicott's words (1973), the question that needs to be answered is which factors contribute to make (or not) a caregiver a "good enough" human being?

This article will focus on a specific long-standing hypothesis about an essential element that contributes to determining individual parenting styles in terms of a so-called "intergenerational transmission." This hypothesis essentially states that parents' behavior with their children is similar to the quality of the care they were exposed to during childhood. We present empirical and theoretical evidence to support this hypothesis, the stability of parenting styles and of maltreatment across generations. Finally, we suggest that psychoanalytic theory is the most suitable framework to fully understand the processes that play a role in the stability of child-rearing strategies through generations. In fact, from a psychoanalytic perspective, what is transmitted across generations is not only a behavioral style but also a more complex structure of the self that affects all relationships, both at conscious and, more importantly, at unconscious levels (Stern et al., 1998).

Are we turning into our parents?

Many theoretical models of human development predict the stability of child-rearing strategies across generations, although from different perspectives. Belsky, Conger, and Capaldi (2009) notably argued that life course (Elder, Johnson, & Crosnoe, 2003), attachment (Bowlby, 1969), and social learning theories (Bandura, 1977) all agree on behavioral continuity, even if they differ in defining the mechanisms that enable the process. More specifically, attachment theory (Bowlby, 1969) proposes that a caregiver's ability to provide security during early interactions will shape adults' cognitive and affective representations of significant relationships. Furthermore, from an evolutionary standpoint, intergenerational transmission provides a clear advantage: If individuals have the opportunity to parent their own offspring, it is very likely that the characteristics of the care they received is sufficiently adaptive in that specific envi-

ronment. Finally, clinicians have repeatedly observed that maltreating parents report having experienced disruptive care and abusive behaviors during their own childhood. This observation has led to the development of clinically derived models, such as the concept of "identification with the aggressor" described by Anna Freud (1936): "by impersonating the aggressor, assuming his attributes or imitating his aggression, the child transforms himself from the person threatened into the person who makes the threat" (p. 113).

Empirical evidences of intergenerational transmission of parenting

The first empirical approaches to testing the intergenerational transmission hypothesis were formulated in the 1950s and focused mainly on the transmission of maltreatment. Researchers unanimously reported findings on the etiology of abusing behaviors: Abusive parents had been abused or maltreated as children. For instance, Steele and Pollock (1968) showed that maltreating parents reported family histories that were characterized by the same abusive patterns they created with their own children. During childhood, these parents had been deprived of adequate and sensitive caregiving from their own parents. Komisaruk (1966) found the most striking statistic in his abusive parent sample to be the high percentage of individuals who had lost a significant parental figure during childhood. Caspi and Elder (1988) designed one of the first prospective studies to directly assess the quality of care provided by the first generation (G1) and the caregiving behavior of the second generation (G2) while interacting with the third generation (G3). In a risk sample, Caspi and Elder found the stability of parenting across the generations mediated by aggressive behavior. Many studies in the following years confirmed these results (e.g., Kovan, Chung, & Sroufe, 2009). More recent research has broadened the perspective on the intergenerational transmission of parenting, showing that constructive and sensitive parenting behaviors are also stable across generations (Belsky, Jaffee, Sligo, Woodward, & Silva, 2005).

In search of discontinuities

The number and quality of the aforementioned prospective studies definitively support the evidence for the intergenerational transmission of parenting. However, the continuity across generations is not as clear-cut as expected because all studies consistently report that childhood rearing history accounts for approximately 15% of the variance in parenting (Belsky et al., 2005; Capaldi, Pears, Patterson, & Owen, 2003). Thus, research interest has focused on attempting to explain the "lawful discontinuities," that is, why some parents do not fulfill the expectation of repeating their childhood experiences (Belsky et al., 2009). Only a few studies have reported moderation models that are partially able to shed light on this topic. Egeland, Jacobvitz, and Papatola (1987) showed that maltreated children who experienced a supportive, close relationship during their life did not abuse their own children. A fulfilling and supportive romantic relationship or a fruitful therapy can constitute a protective factor (Quinton & Rutter, 1984). Belsky, Hancox, Sligo, and Poulton (2012) tested the hypothesis that parental age (as a proxy for increased psychological maturation) could decrease the association between childhood experience and parenting behaviors, but they found no significant results. Beaver and Belsky (2012) conducted probably the most complete study on potential moderating variables of intergenerational continuity, testing the differential susceptibility hypothesis (Bakermans-Kranenburg & van IJzendoorn, 2015), which is the idea that genetic variables drive the level of influence of the environment on individuals' development. As expected, the participants who carried the most plasticity alleles were more affected by the quality of maternal parenting compared with those carrying the fewest plasticity alleles, both for better and for worse.

In sum, research has found a significant but small continuity effect of parenting across generations. Although there are different factors that can explain why the effect is small, the findings are not consistent.

An attachment perspective: The caregiving system

Bowlby (1969) defined attachment in terms of the ethological concept of a behavioral system, a biologically evolved program that organizes behaviors to increase survival and reproduction. Bowlby claimed that the behavioral system played a central role during an individual's entire life: The goal remains the same, although the behaviors to achieve the objective change according to the current developmental tasks during the life span. The caregiving system is conceived of as being a complementary behavioral system, entailing a shift from seeking protection to providing it (George & Solomon, 2008). Both systems share the same behavioral goal—the protection of the child—and as a consequence the same adaptive function, an increase in the individual's reproductive fitness (Belsky, 1997). In fact, the caregiving system is believed to be activated by situations that are perceived by the parent as dangerous, fear provoking, or upsetting for the child. The cues that usually activate caregiving behaviors in adults are separations, dangers, and children's signals such as crying. Consistent with the strong feeling aroused by attachment, caregiving is also associated with strong emotions. Parents who are separated from their children are expected to feel negative emotions and to seek a reunification with their offspring. When children are in danger or distressed, especially when parents are not able to comfort them, anxiety and despair will encourage parents to increase their protection efforts. On the contrary, satisfaction accompanies the ability to comfort and provide security for one's children (Bowlby, 1969; George & Solomon, 2008).

Bowlby (1969) proposed that an infant's first experiences in interactions with the caregiver lead to the development of expectations regarding a feeling of security. Later, these expectations become organized representations—or internal working models—of the self, significant others, and the relationship between the two (Bretherton & Munholland, 2008; Pietromonaco & Barrett, 2000). Since self–other relationship representations are considered to organize emotion (Cassidy, 1994; Fonagy, Gergely, & Target, 2008), emotion regulation processes develop

in a relational context and will condition all future relationships in a dynamic interplay. Parent–child affective communication provides the context in which the child can experiment, understand, and organize affective experience (Cassidy, 1994). A secure child is engaged in a relationship with a sensitive parent who is able to decode and adequately respond to infant signals. The expectation of a supportive parent during the experience of negative affects allows the child to anticipate that negative states can be temporarily tolerated and coregulated (Beebe et al., 2010). In adulthood, these representations of childhood attachment experiences also affect the caregiving system. A confirmation of the similarities and overlap between the attachment and caregiving systems comes from development of the adult attachment gold standard measure, the Adult Attachment Interview (Main, Kaplan, & Cassidy, 1985). Main and colleagues noticed that the quality of adult narratives in relation to childhood attachment experiences could discriminate between mothers of children with different attachment patterns. Consequently, they offered a new definition of internal working models in terms of the (conscious and unconscious) rules that organize information relevant to attachment. The focus here is not on the childhood experiences per se but on the ability to reflect on them in a coherent manner. Internal working models can act in a way similar to defensive mechanisms (Fonagy et al., 2008) because they can distort mental states in order to reduce anxiety, distress, or displeasure. These mental operations are thought to be quite stable (Bowlby, 1969), thus ensuring the continuity of the attachment system during the life span. Moreover, internal working models seem to also affect caregiving processes and to be passed on in some way to the next generation. Bretherton (1985) proposed a process of identification: An "individual may be using the internal model of the parent to guide his or her own parenting behavior" (p. 23). In other words, the attachment and caregiving systems are different, but they seem to be connected in part because the mothers' attachment experiences are predictive of their own children's future attachment (van IJzendoorn, 1995; Verhage et al., 2016).

A psychodynamic perspective on parenting across generations

Psychoanalytically oriented scholars did not specifically study the intergenerational transmission of parenting empirically, at least not its normative aspects, but research was conducted to focus on the importance of the primary relationships in structuring psychic organization. These studies will be described briefly in order to suggest that children's early relational experiences are a primary source of self-construction. As a consequence, the self-related representational processes may constitute the core process explaining the stability across generations, rather than mere parenting styles. For instance, Stern (1993) proposed that during dyadic interactions, affective manifestations arise and take the form of vitality affects, a *gestalt* of emotional expressions, movements, directions, and sharing that come together all at once. The "maternal affect attunement" enables "interpersonal communion [and] will play an important role in the infant's coming to recognize that internal feeling states are forms of human experience that are shareable with other humans" (Stern, 1985, pp. 151–152). Tronick and Gianino (1986) microanalytically studied mother–child interactions and found that the balance of self and other regulation of the children was a profoundly dynamic process. In fact, only a small portion of the time dedicated to dyadic interaction consists of matching behavioral states, approximately 30%. It seems that an adaptive mother–child interaction relies on the process of rupture and reparation of contingencies between mothers and children. Moreover, Beebe and Lachmann (2013) showed that interactions that are excessively contingent can inhibit children's development of adaptive forms of self-regulation, whereas notable lack of contingency can lead to exaggerated self-regulation on behalf of children. It is noteworthy that in both cases psychic development is affected. This emphasis on a balance between self and mutual regulation echoes Bion's (2013) perspective on reverie, the maternal function that allows a child's mental development:

> *Normal development follows if the relationship between infant and breast permits the infant to project a feeling, say, that it is dying,*

> *into the mother and to reintroject it after its sojourn in the breast has made it tolerable to the infant psyche. If the projection is not accepted by the mother the infant feels that its feeling that it is dying is stripped of such meaning as it has. It therefore reintrojects, not a fear of dying made tolerable, but a nameless dread. (p. 307)*

Fonagy and Target (2002) propose this process as the key to the development of subjectivity: "We suggest that the function of attachment is to bring complex mental life into being from a complex and adaptable behavioral system" (p. 325).

Modern neurophysiological models support this view of psychic development based on interpersonal exchanges with significant others (Ammaniti & Gallese, 2014; Schore, 2012). In particular, the mirror neurons perspective (Rizzolatti & Sinigaglia, 2010), even if still studied at an early stage in children development, sheds light on how the perception of another individual can shape one's own mental states and emotional self. Embodied simulation (Ammaniti & Gallese, 2014), driven by the mirror system, shapes a basic form of mentalization that does not require a propositional level, but is based on bodily representations (e.g., somatic effects of emotions). Therefore, the development of the infant's self seems deeply grounded in primary relationships and relies on caregiver processing that goes beyond mere parenting behaviors. These considerations strongly support the hypothesis of the transmission of parenting across generations because they show that early caregiving actually contributes to the development of infant subjectivity, which in turn will affect the following generation (Schore, 2012).

Does abuse beget abuse? Intergenerational transmission of maltreatment

The research findings reviewed so far do not directly assess the perpetuation of maltreatment, but when discussing dysfunctional parenting, the researchers mainly report having observed harsh parenting behavior. There is obviously a positive correlation between harsh parenting and abusive behaviors, but most harsh parenting does not fulfill the criteria for being considered abuse. Thus, the question addressed in this section differs from

the previous one on the transmission of parenting, and is probably related to the literature on the so-called cycle of violence.

Kaufman and Zigler (1987) reviewed early studies on the intergenerational transmission of child abuse. Despite a widespread belief among clinicians in the stability of such transmission across generations, the empirical evidence is scarce, highlighting that the vast majority of abused parents do not abuse their children. The unqualified acceptance of the intergenerational hypothesis has had numerous negative consequences, including prejudice toward abused individuals and a lack of research on the real causes of maltreatment.

Some recent studies have generally supported the intergenerational hypothesis (e.g., Schofield, Lee, & Merrick, 2013), but others have found no evidence (e.g., Renner & Slack, 2006). Widom, Czaja, and DuMont (2015) published a study that can be considered outstanding for the size of the sample (N = 1,147), the prospective 30-year longitudinal design, and the evaluation of outcomes using multiple sources of information (parent and nonparent self-reports, offspring reports, and child protection agency records). The results showed that the magnitude of the intergenerational transmission effect depended in large part on the source of information used. In particular, child protective services reports are likely to be problematic because of the high rate of detection or surveillance bias.The offspring of abused parents are more likely to report sexual abuse and neglect, although, surprisingly, not physical abuse.

Breaking the cycle: Interventions to prevent harsh parenting

Many interventions have focused on improving the quality of parental behavior, particularly caregivers' sensitivity (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2003). A number of meta-analytic studies were conducted to synthetize results on the effectiveness of intervention programs aimed at preventing or reducing child maltreatment. Euser, Alink, Stoltenborgh, Bakermans-Kranenburg, and van IJzendoorn (2015) tested the effectiveness of the randomized clinical trials aimed at preventing child maltreatment and reducing the rate of child abuse and

neglect in abusive families. Unfortunately, disappointing results emerged. A small but significant pooled effect on maltreatment was found but disappeared when publication bias was taken into account.

Psychodynamic notes on intergenerational transmission of dysfunctional parenting

The idea of a transmission of expectations and desires from parents to children is a fundamental idea in the history of psychoanalysis. Sigmund Freud (1914/1963) first described the parental narcissistic investment toward the child, defined as "his majesty the baby" (p. 90). In Ferenczi's (1931, 1933/1980) exploration of early trauma consequences, the loss of the feeling that the world can be a safe place annihilates the child's subjectivity: "The weak and undeveloped personality reacts to sudden unpleasure not by defence, but by anxiety-ridden identification and by introjection of the menacing person or aggressor" (Ferenczi, 1933/1980, cited in Frankel, 2002, p. 103). Even if Ferenczi does not directly discuss the effects of early trauma on parenting the next generation, the identification process is substantially connected to the caregiving modalities experienced by the child and, even more, by the affects and thoughts connected to them. Frankel (2002) identifies three steps in Ferenczi's process of identification with the aggressor: First, the child is mentally subordinated to the aggressor. Second, the child "divines" the aggressor's desires and enters his or her own mind in order to anticipate frightening behaviors and increase the adaptation. Finally, the child annihilates himself or herself through submission and attuned compliance. Anna Freud (1936) identified the consequences of this transition from victim to victimizer, but Ferenczi's reflection is broader because it refers to the loss of inner authenticity and selfhood, describing an effect in some way similar to Winnicott's (1960a) concept of false self-organization. In Winnicott's approach, the mother's lack of ability to mirror the child's affects and emotions leads to the denial of authenticity and the construction of a compliant self that adapts to the parent's requests.

From a contemporary point of view, Fonagy, Gergely, Jurist, and Target (2002) describe the mother's mirroring attitude as the process by which children learn how to regulate their own emotions and construct mental representations. In both Ferenczi's and Winnicott's perspectives, the consequences on child's development are not only the denial of the real self, but also that "one may come reflexively to place oneself in the mind of everyone around him, scanning, checking out everyone as a possible threat, feeling that a repetition of one's trauma is just around each corner" (Frankel, 2002, p. 115). In other words, abusive parents will drive their own children's development to become simultaneously very careful and very insensitive to others' needs and feelings. Victims of abusive parents can develop a strong fear of everyone who is different from them because they are perceived as being potentially dangerous. As a consequence, they can attempt to influence others in ways that can become aggressive (Ferenczi, 1933/1980). Extending this perspective to the next generation, parents who did not work through their abusive childhood can be extremely frightening (Lyons-Ruth, Bronfman, & Atwood, 2000) because they will force their own mental states into their children, leaving no space for subjectivity or authenticity. In this way, the intergenerational pathway of abusive parenting seems to be completed.

The description of the consequences of identifying with the aggressor impressively resembles the philosophical concept called *epistemic vigilance*, the "trust in the authenticity and personal relevance of interpersonally transmitted information" (Fonagy & Allison, 2014, p. 372). Building upon the empirical evidence of the association between mothers' attachment security and the development of children's epistemic trust, Fonagy proposed that an exaggerated vigilance toward communication with others is implicated in the development of personality disorders. From a clinical perspective, Fonagy and Target (2002) defined the hostility expressed by a traumatized mother in psychotherapy as a "traumatic reenactment" (p. 446). The lack of authenticity is described in terms of deficits in emotion recognition and regulation: "Her rage flared up and automatically poured out; it loomed ominously in her psychic functioning. Teresa must have

felt tremendous fear in the situation of having to defend herself as a mother, yet her rage contaminated the experience of this or any other affects" (p. 447). Once again, the association between fear and aggression was established, and the incapability of accessing the real emotional experience enabled the intergenerational transmission.

Fraiberg, Adelson, and Shapiro (1975) directly addressed the question of parenting transmission by referring to the history of mothers with the evocative expression of "ghosts in the nursery." Powerfully described as "the uninvited guests at the christening [that] conduct the rehearsal of the family tragedy from a tattered script" (pp. 387–388), the ghosts represent repetitions of the past in the present: parents' unremembered early experiences of fear during childhood that unintentionally imbue their caregiving. The parent's visceral reactions are driven by the unrecognized past experience, and the parent fails to adequately recognize or respond to the child's signals for security. The children's distress signals are either ignored or interpreted as expressions of hostility, therefore inducing an angry reaction from parents (Lieberman, Padrón, Van Horn, & Harris, 2005). More specifically, Fraiberg et al. described the ghosts in the nursery not as the direct effects of the real events of harsh parenting, but as the repression of affects associated with a real frightening experience. In this sense, parents' negative childhood events do not automatically imply that the same experiences will be actualized with their children. Fonagy, Steele, Moran, Steele, and Higgitt (1993) claim that even if not explicitly stated by Fraiberg et al., their clinical work implies that "the quality of the mental representation of the object and the representation of the self's relationship to it may be a further important determinant" (p. 959) in eliciting an intergenerational transmission of maltreatment. Lieberman et al. (2005) suggested the concept of "angels in the nursery" to describe the experience of intense shared affects between a parent and a child, "in which the child feels nearly perfectly understood, accepted, and loved" (p. 504). Finally, a parallel is made between the angels in the nursery and the work in psychotherapy with traumatized parents, in which

fostering the "reemergence" of representations of these figures can elicit a transformative stance.

A step back in order to move forward: Focusing on the processes

In conclusion, we can confirm that empirical research is consistent in supporting the long-lasting hypothesis of stability of parenting across generations. At the same time, the magnitude of the effect and the lack of moderating effects able to explain discontinuities suggest that further research is needed in this field. Even more problematic is the deficiency of theoretical models capable of generating hypotheses to be tested. A clinical consequence of this situation is the disappointing results of the interventions designed to interrupt the vicious cycle of violence that harsh parenting generates, resulting in children maltreatment (MacMillan et al., 2009). Considering the huge advances of psychoanalytically informed infant research in understanding how children organize psychic structures through interactions with others, we intend to highlight the role of psychoanalytic thinking in providing theoretical insights on the underlying mechanisms of intergenerational transmission. The "implicit relational knowledge" (Stern et al., 1998) that lies at the core of human relationships and that has been deeply investigated by many scholars in the psychoanalytic field is likely to be involved in determining this stability across generations. The closeness of the distinct motivational systems of attachment and caregiving can be considered a confirmation of this idea. Exploring the mechanisms implicated in the transmission of dysfunctional parenting can lead to the formulation of new hypotheses that can therefore be tested in longitudinal designs.

This need for a psychoanalytic perspective on intergenerational transmission can be enriched by the new fruitful field of research that investigates the basic neurophysiological and psychological processes affected by early parenting experiences, which are in turn responsible for parenting behaviors. In particular, studies on the effects of early stress on childhood and adult neurophysiological functioning are now at the cutting edge of

international research. This huge corpus of research does not entirely address the topic of parenting or, more specifically, the intergenerational transmission of parenting styles, but many relevant studies have been conducted in this direction (Atzil, Hendler, & Feldman, 2011; Swain et al., 2014). Moreover, effects (which can be directly relevant) have started to emerge (Lomanowska, Boivin, Hertzman, & Fleming, 2017), and the first attempts to review and synthesize them can be made in order to propose new theoretical approaches (Rutherford, Wallace, Laurent, & Mayes, 2015). This process could be enriched by a psychoanalytically informed perspective. The richness of clinical and research insights on the mechanisms that explain the implicit learning of emotion regulation strategies and self and other representations can be a key to understanding and drive the research on the underlying mechanisms of intergenerational stability. The fundamental question that needs to be answered is "how do individuals 'store' their caregiving experience during childhood in a way that directly affects their parenting abilities with the new generation?" Psychodynamic thinking can provide the theoretical framework (with empirical evidence) to understand the connection between early experience and adult functioning, representations, and emotion regulation abilities.

The mother–child mirroring process well depicts the interactive process that children require to develop self-regulation abilities and build their psychic organization. This implicit coconstruction of regulation processes has been supported by empirical evidence and has produced new theories (i.e., principles of organization, Beebe & Lachmann, 2002; and biofeedback, Fonagy et al., 2002). Considering the quantity of studies that support the existence of an implicit level of very early communication between mother and child and the idea that parents' emotion regulation plays a central role in supporting their caregiving abilities (Rutherford et al., 2015), it is likely that the same implicit communication plays a central role in shaping the functions and processes that many years later will contribute to determining individuals' parenting styles. There is some indirect evidence from neuroscience that can also support this perspective. For instance, Strathearn, Fonagy, Amico, and Montague

(2009) found that mothers with secure attachment representations showed more activation in reward areas and higher oxytocin responses during the perception of their own children. Riem and colleagues (Riem, Bakermans-Kranenburg, & van IJzendoorn, 2016; Riem, Bakermans-Kranenburg, van IJzendoorn, Out, & Rombouts, 2012) found that insecure women who saw their infants crying showed enhanced amygdala activation and more benefits from oxytocin administration. In all these studies, adult attachment was measured by means of the Adult Attachment Interview, which does not describe the quality of the early experience per se. Even if we know that attachment tends to be stable across time (Bowlby, 1969), the use of retrospective instead of prospective studies constitutes a major limitation in interpreting the findings. Prospective studies in this field are still rare because of the novelty of the approach and the often exploratory nature of the studies. There are, in any case, some important exceptions (e.g., Zerach, Kanat-Maymon, Aloni, & Solomon, 2016). However, there are indications of the role of early experience in shaping the implicit neurophysiological processes (Lyons-Ruth, Pechtel, Yoon, Anderson, & Teicher, 2016) that are likely to be extended to parenting-relevant processes.

A psychoanalytically informed perspective provides a framework for connecting the early childhood experience with the adult parenting functioning. An attachment-related trauma during childhood, particularly parental emotional unresponsiveness, is an established pathway toward the development of dissociative processes (Bromberg, 2012; Dutra, Bureau, Holmes, Lyubchik, & Lyons-Ruth, 2009). The dissociative experience seems to reemerge during adulthood when the adult is asked to take the role of the parent: The adult's fear of reenacting the painful emotions connected to the attachment experience undermines the quality of interactions with the child. In this way, the already mentioned "nameless terror" seizes the individual, and an "unthought known" (Bollas, 1989) drives behavior and interferes with the perception of the child's needs. The ghost in the nursery becomes preeminent: The parent is not able to accept the child's subjectivity and to mentalize with respect to mental states. Thus, the child will not only be unable to see himself or

herself in the mother's eyes, but will also perceive unexpressed fears. Modern attachment research has defined these relational features of dysfunctional motherhood as frightened or frightening behaviors, which are most frequently found in traumatized mothers (Lyons-Ruth, Yellin, Melnik, & Atwood, 2005). In extreme cases, maltreating behavior can be considered an attempt to avoid the distress of early implicit memories (Amos, Furber, & Segal, 2011). Neuroscientific evidence suggests that triggers of this unresolved experience are infants' stimuli, able to elicit childhood experiences (S. Kim, Fonagy, Allen, & Strathearn, 2014). The common ground between the attachment and the caregiving systems seems to facilitate exchanges between the experience during childhood and the role of parents in adulthood (De Carli, Tagini, Sarracino, Santona, & Parolin, 2016). The research also provides different (not mutually exclusive) explanations for the process that constitutes "traumatic body memories" that allow early stress to affect later functioning and behavior, for instance, epigenetic programming (Champagne & Curley, 2009), altered brain anatomy (e.g., P. Kim et al., 2010) and functionality (e.g., P. Kim, Ho, Evans, Liberzon, & Swain, 2015), or specific functioning of endocrine systems (Flanagan, Baker, McRae-Clark, Brady, & Moran-Santa Maria, 2015; Riem, Bakermans-Kranenburg, Huffmeijer, & van IJzendoorn, 2013). Although these research fields describe mechanisms for understanding human development, they do not provide clinically relevant metaphors. In order to create effective interventions, theories have to lead to an understanding of the recurrent presence of representations derived from parents' histories that intrude upon and affect the interaction with the child. This seems to be one of the most successful aspects of psychodynamic thinking: to highlight the primary role of interactions and explore the most obscure, implicit, and unconscious aspects of relationships. Even more importantly, psychoanalytic practice offers techniques to detect and work through the relational patterns that emerge as transference in analytic interactions. The clinical and theoretical comprehension of the processes that unfold in the intergenerational transmission of parenting, and the study of the biological processes that allow the early experience

to affect current interactions, need to inform each other's perspectives.

In conclusion, we suggest that more research is needed in two directions: On the one hand, we need to explore the mechanisms of intergenerational transmission in depth from a neurophysiological perspective. On the other hand, more psychoanalytically informed research can help in developing theories that are as clinically relevant as possible, in order to depict the relational configurations that emerge during intergenerational transmission. We claim that a cross-fertilization between the two perspectives could lead research toward new hypotheses to be tested in order to build a broader and deeper framework. The final aim is to develop interventions able to break the intergenerational cycle of harsh parenting and abuse, which can be pursued only by combining clinical and empirical perspectives.

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