Parental Embodied Mentalizing: Let's Be Explicit About What We Mean by Implicit

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defined as the "parental capacity to (a) implicitly conceive, comprehend, and extrapolate the infant's mental states (such as wishes, desires, or preferences) from the infant's whole-body kinesthetic expressions and (b) adjust one's own kinesthetic patterns accordingly"-represents the first known attempt to conceptualize parental mentalizing in a theoretical and empirical framework that moves beyond parents' verbal and declarative capacities toward the infant's realm of experience: that of quality of movement, rhythms, space, time, sensations, and touch. This response article discusses the implicit nature of PEM in CHILD DEVELOPMENT PERSPECTIVES light of emerging neuroscientific evidence showing that independent mechanisms subserve implicit and explicit mentalizing. It argues that the development of children's sense of ownership and agency at the embodied level necessitates the interpersonal encounter, mediated by parental embodied mentalizing. KEYWORDS-mentalizing; parent-infant interaction; parental embodied mentalizing; nonverbal; body Grants

Much like in the relational approach of mentalizing, according to which a meaningful and subjective self is constituted through the other (Fonagy, Gergely, Jurist, & Target, 2002; Tronick, 2005), we are fortunate to belong to a stimulating and challeng-

ABSTRACT—Parental embodied mentalizing (PEM)—

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ing scientific community in which collaborative discourse advances understanding. It appears that the commentaries' main question concerns the realm of experience to which parental embodied mentalizing (PEM) belongs. Is it a verbal capacity or a nonverbal one? Are these mutually exclusive domains? Here, in limited space, we offer a considered yet critical response to these thoughtful commentaries.

It seems indisputable that parental mentalizing influences the child's emotional, social, and cognitive development (e.g., Arnott & Meins, 2007; Meins, 1997; Sharp, Fonagy, & Goodyer, 2006). We defined PEM as the "capacity to (a) implicitly conceive, comprehend, and extrapolate the infant's mental states (such as wishes, desires, or preferences) from the infant's whole-body kinesthetic expressions and (b) adjust one's own kinesthetic patterns accordingly" (Shai & Belsky, 2011, p. 175). This is the first known attempt to conceptualize this source of parental influence in a theoretical and empirical framework that moves beyond parents' verbal and declarative capacities toward the infant's realm of experience-that of quality of movement, rhythms, space, time, sensations, and touch.

Mentalizing can involve automatic, spontaneous, and implicit or controlled, and explicit processes, each subserved by independent and distinct patterns of neural activation (Fonagy & Luyten, 2009; Lieberman, 2007; Satpute & Lieberman, 2006; Uddin, Iacoboni, Lange, & Keenan, 2007). Explicit mentalizing is typically interpreted, conscious, verbal, and reflective; it is a slow process that necessitates awareness and activates, in general, phylogenetically newer brain circuits involved in processing linguistic and symbolic material (Fonagy & Luyten, 2009). Implicit mentalizing, in contrast, is perceived, nonconscious, nonverbal, and unreflective; it involves much faster processing, is reflexive, requires little effort, focused attention, or intention, and activates older brain circuits that rely heavily on sensory information (Fonagy & Luyten, 2009; Satpute & Lieberman, 2006). We maintain that PEM is an implicit process that does not involve parents' controlled awareness-whether concerning the process of interpreting the infant's movement as manifesta-

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tions of mental states or in decision making determining parents' embodied responses.

This is not to say that PEM cannot become accessible to conscious reflection, whether evident in verbal expressions, such as mind-mindedness (Meins, 2011) or experiential means, such as embodied self-awareness (ESA; Fogel, 2011). Development of a coherent sense of self and of self-awareness involves moving from purely bodily processes and sensations toward elaborate symbolic representations that one can reflect on and consciously link to personal and interpersonal experiences. In fact, these processes of gaining access to and the translation of unconscious, bodily sensations and responses to symbolic representations in the form of words is at the heart of many forms of therapy, including psychoanalysis, parent–infant psychotherapy, or dance movement therapy.

When parents fail to implicitly interpret changes in infants' movements and rhythms as expressive mentalistic signals and fail to respond to them in an embodied manner, this compromises infants' abilities to feel—at *the embodied level*—that they are the owners of their bodies and active agents capable of influencing others (as well as things). This is because we theorize that parents' implicit embodied mentalizing facilitates these developmental achievements, as it underpins the process through which parents transform infants' movements into meaningful and intentional mental states. Neurological processes involved in body representation are necessary, but without the interpersonal encounter, mediated by PEM, they are insufficient to assist such fundamental development.

REFERENCES

Arnott, B., & Meins, E. (2007). Links between antenatal attachment representations, postnatal mind-mindedness, and infant attachment security: A preliminary study of mothers and fathers. *Bulletin of the Menninger Clinic*, 71, 132–149.

- Fogel, A. (2011). Embodied awareness: Neither implicit nor explicit, and not necessarily nonverbal. *Child Development Perspectives*, 5, 183–186.
- Fonagy, P., Gergely, G., Jurist, E. L., & Target, M. (2002). Affect regulation, mentalization, and the development of the self. London: Karnac.
- Fonagy, P., & Luyten, P. (2009). A developmental, mentalization-based approach to the understanding and treatment of borderline personality disorder. *Development and Psychopathology*, 21, 1355– 1381.
- Lieberman, M. D. (2007). Social cognitive neuroscience: A review or core processes. Annual Review of Psychology, 38, 64–74.
- Meins, E. (1997). Security of attachment and the social development of cognition. Hove, UK: Psychology Press.
- Meins, E. (2011). Sometimes words will do. Child Development Perspectives, 5, 181–182.
- Satpute, A. B., & Lieberman, M. D. (2006). Integrating automatic and controlled processing into neurocognitive models of social cognition. *Brain Research*, 1079, 86–97.
- Shai, D., & Belsky, J. (2011). When words just won't do: Introducing parental embodied mentalizing. *Child Development Perspectives*, 5, 173–180.
- Sharp, C., Fonagy, P., & Goodyer, I. (2006). Imagining your child's mind: Psychosocial adjustment and mothers' ability to predict their children's attributional response styles. *British Journal of Developmental Psychology*, 24, 197–214.
- Tronick, E. Z. (2005). Why is connection with others so critical? The formation of dyadic states of consciousness: Coherence governed selection and the co-creation of meaning out of messy meaning making. In J. Nadel & D. Muir (Eds.), *Emotional development* (pp. 293–315). Oxford, UK: Oxford University Press.
- Uddin, L. Q., Iacoboni, M., Lange, C., & Keenan, J. P. (2007). The self and social cognition: The role of cortical midline structures and mirror neurons. *Trends in Cognitive Science*, 11, 153–157.