Maternal Reflective Functioning, Mother-Infant Affective Communication, and Infant Attachment: Implications for Psychodynamic Treatment with Children and Families

By John Grienenberger, Ph.D. and Arietta Slade, Ph.D.

Prepared for the newsletter of Division 39 of the American Psychological Association

John Grienenberger, Ph.D. is a recent graduate of the doctoral program in clinical psychology at the City University of New York. He is currently Child Program Coordinator at the Wright Institute Los Angeles and in private practice as a psychological assistant in West Los Angeles. Dr. Grienenberger would like to thank Gary Cox-Steiner, Ph.D. and the Center for Mental Health Promotion for the generous grant support of this research.

Arietta Slade, Ph.D. is Visiting Professor at the Yale Child Study Center and Professor of Clinical and Developmental Psychology, City University of New York.

Introduction

Developmental research has increasingly sought to uncover the intersubjective foundations of early cognitive and emotional development. Recent theories emphasize the importance of the parental capacity to comprehend the developing mind of the child and to communicate this in a manner that gives the child a sense of his or her own mind (Fonagy, Target, Gergely, & Jurist, 2001; Slade, 2002). This capacity is thought to be closely tied to the quality of the regulatory functions provided by the parent. In other words, the parent must rely on an emerging understanding of the child’s mind in order to effectively engage with the child at the level of behavior.

The study reported here was conducted as a part of the Pregnancy Project, which is headed by Professor Arietta Slade at the City University of New York. The Pregnancy Project has sought to explore various aspects of early mother-infant attachment relationships, with a particular focus on the intergenerational transmission of attachment. The present study is one of a number from our lab examining the relation between maternal reflective functioning and attachment processes (Grienenberger, Kelly, & Slade, 2001; Slade, Grienenberger, Bernbach, Levy, & Locker, 2001). This particular study examines the link between maternal reflective functioning and the quality of mother-infant affective communication. Affective communication is considered as a potential predictor of the quality of infant attachment.

Measuring Maternal Reflective Functioning

The construct of *reflective functioning (RF)* was developed by Peter Fonagy and his colleagues at the University College London (Fonagy, Steele, Steele, Leigh, Kennedy, Mattoon, & Target, 1995; Fonagy et al., 2001). Fonagy and his colleagues have defined RF as the capacity to understand that one’s own or another’s behaviors are linked in meaningful ways to underlying mental states, to feelings, wishes, thoughts, and desires. RF refers to the awareness that an individual’s behavior is a reflection of likely unobservable, changing, dynamic intentions and emotions. Fonagy and his colleagues note that RF includes “both a self-reflective and an interpersonal component that ideally provides the individual with a well-developed capacity to
distinguish inner from outer reality, pretend from ‘real’ modes of functioning, intra-personal mental and emotional processes from interpersonal communications” (Fonagy, Target, Steele, & Steele, 1998).

The original RF measure was designed for application to the Adult Attachment Interview (AAI) (George, Kaplan, & Main, 1984); thus, RF referred to parents’ capacity to reflect upon their experiences with their own parents as these pertained to their experiences as children. In the present study, we examined parents’ capacity to reflect upon their child’s internal experience and upon their own experience as parents. We interviewed mothers using the Parent Development Interview (PDI) (Aber, Slade, Berger, Bresgi, & Kaplan, 1985), which was designed to assess a parent’s representation of her child, herself as a parent, and her relationship with her child. Unlike the AAI, which assesses representations of past experiences, the PDI elicits representations derived from an ongoing relationship with the child. The level of RF was determined using an adaptation of Fonagy and his colleagues’ RF scoring criteria (Slade, Grienenberger, Bernbach, Levy, & Locker, 2002).

Essential to maternal RF is the capacity to recognize that her child has mental states. But it is her capacity to link this awareness of her child’s or her own internal state to behavior or to other internal states that is the hallmark of true reflectiveness. Here is a hypothetical example of a mother responding to a question about times when her child feels distressed: “He had a fit at the pharmacy (behavior) because it was late afternoon and he was exhausted and probably hungry by that point (physical state). We had been out for several hours, and I think he was tired of it and wanted to just go home (mental state).” Here is a more complex example in which the mother makes multiple links between the mental states and behaviors of both herself and her child: “He occasionally gets really angry (child’s mental state) for reasons that I don’t really understand (link to mother’s mental state). He sometimes tries to tell me something, and I respond, but it turns out that he really wanted something else (child’s mental state). I get really confused (mother’s mental state) when I don’t know what he is asking for or what he is feeling (link to child’s mental state), and it gets harder to figure out the more he starts to tantrum (child’s behavior). I may try to pick him up, but then I realize that he doesn’t want that at all because he is in the midst of feeling angry (appreciates child’s mental state). When that happens, I realize that it is me who has the need to hold him and make him feel better, but he wants nothing of it, so I will put him back down (making the distinction between her own needs and those of the child).

Measuring Disruptions in Affective Communication

The quality of mother-infant affective communication was assessed by the Atypical Maternal Behavior Instrument for Assessment and Classification (AMBIANCE, Version 2) (Bronfman, Parsons, & Lyons-Ruth, 1999), which tracks maternal disruptions in affective communication during the Ainsworth Strange Situation. The AMBIANCE measure was developed by Karlen Lyons-Ruth and her colleagues at the Harvard Medical School. The Strange Situation is a standardized videotaped experimental paradigm during which the infant is exposed to a number of stressors that are designed to elicit his attachment behavioral system. The AMBIANCE measure was developed in order to assess the various types of maternal behavior that have been hypothesized to be associated with infant disorganized attachment. This instrument differs from most previous measures of maternal behavior because it focuses specifically on moments in which the mother disrupts or intrudes upon the mother-infant interaction in ways that are disregulating to the child. Prior measures have tended to focus on maternal sensitivity or responsiveness. In essence, the AMBIANCE measure is able to track instances in which there are breakdowns in the mother’s ability to contain the infant’s negative
The AMBIANCE measure is made up of the following five dimensions: 1) Affective Communication Errors; 2) Role or Boundary Confusion; 3) Fearful, Disoriented, Dissociative, or Disorganized Behavior; 4) Intrusiveness or Negativity; and 5) Withdrawal.

**Procedure**

The subjects were forty-four middle-class mothers and their infants. The data included scores of maternal RF, scores of maternal disrupted affective communication, and infant attachment classifications. Maternal RF scores were derived from transcripts of the PDI. Both the maternal disrupted affective communication scores and the infant attachment classifications were derived from the Ainsworth Strange Situation procedure.

**Hypotheses**

The study’s first experimental hypothesis predicted that mothers rated as higher in reflective functioning would be less likely to evidence disruptions in affective communication. The study’s second hypothesis predicted that mothers of disorganized or otherwise insecure infants would have higher levels of disruption in affective communication than would mothers of secure infants.

**Results**

Results provided significant support for both of the study’s major hypotheses. Maternal RF had a strong negative correlation with maternal disruptions in affective communication ($r = -.474$, $p<.001$). This correlation represents a large effect size. Thus, a mother’s capacity to reflect upon her infant’s mental state is inversely related to the degree to which a mother responds to her infant’s distress with behaviors that are characterized as intrusive, hostile, frightening, or withdrawn.

The quality of maternal behavior was also shown to be a very good predictor of infant attachment. Mothers with high levels of disruption in affective communication were more likely to have infants classified as disorganized, avoidant, or resistant, whereas mothers with low levels of disruption in affective communication were more likely to have infants classified as secure ($p<.01$, moderately large effect size). Each of these results will be discussed in relation to the implications for developmental theory, psychoanalytic theory, and clinical treatment.

**Discussion**

There has been an increasing emphasis in the attachment literature upon the centrality of affect regulation within early caregiving relationships. This has provided a strong theoretical basis for understanding individual differences, at both the behavioral and the representational level, as alternate manifestations of a particular style of affect regulation. The literature in the area of reflective functioning, however, goes a step further. This work suggests that reflective functioning not only evidences the quality of affect regulation, but that it can also help determine a person’s ability to regulate affect. Painful affect becomes manageable, in part, because the person can see painful feelings, or disturbing thoughts, as merely mental states, rather than concrete realities, thus opening the possibility for modulation and change over time.

Fonagy’s theory of reflective functioning was developed with special consideration for Bion’s (1962) concept of affect containment. Fonagy suggests that secure attachment is the direct outcome of successful containment, namely the parent’s capacity to both reflect the infant’s internal state, as well as represent that state for the infant as a manageable image. Insecure attachment evidences failures of containment that differ in terms of the defensive compromises adopted by the caregiver (Fonagy, 1996; Fonagy et al., 1995). The reflective functioning scale for use with the PDI was designed to evaluate the caregiver’s ability to openly
reflect on complex and often uncomfortable mental states without the over-intrusion or the breakdown of defensive processes.

These same kinds of parental difficulties are also thought to exist at the level of the behavioral interactions between parent and child. The mother must not merely demonstrate that she understands the child’s anger, fear, or distress, but she must communicate this behaviorally in a way that serves as a model for the child, thereby indicating that he can have a similar experience of mastery (Fonagy and Target, 1998). With some caregivers, there is a failure of affect mirroring, but the caregiver is able to clearly maintain a parental role, and thereby demonstrate stability and mastery for the child. With others, there is an abundance of affect mirroring but a lack of the necessary calmness and confidence on the part of the caregiver. Finally, with some parents there can be critical breakdowns of both mirroring and mastery, as infant distress becomes a trigger for the caregiver’s own unintegrated and chaotic internal states.

A highly reflective mother is one who can become interested in what is going on in her child’s mind; she understands that knowing this is critical to being a “good enough,” sensitive mother. By reflecting on her own as well as the child’s experience in a variety of ways, she gives him a sense of who he is in a way that he can integrate and internalize. In effect, she provides him with a coherent story that makes sense of his internal experience.

The infant’s developing a coherent, secure, sense of self depends not only upon his mother’s capacity for mentalization, but also upon her capacity to behaviorally respond to his affective state, particularly his distress, in ways that are containing and sensitive. The AMBIANCE measure focuses specifically on negative or disrupted maternal behaviors. This approach is different from prior approaches to coding the mother-infant interaction, which have typically focused on sensitivity, responsiveness, attunement, and acceptance. As noted by van Ijzendoorn (1995), attempts to designate maternal sensitivity as the vehicle of intergenerational attachment transmission have been moderately successful at best. Our results suggest that aggressive and intrusive, and/or fearful and withdrawn behaviors, as well as miscommunications and misattunements may be more likely than maternal sensitivity to be critical in attachment transmission. When mothers respond in ways that disrupt mother-child communication, via behaviors that are frightening, hostile, withdrawn, or misattuned, child disorganization and insecurity are the result. These results raise a number of fascinating and important questions about the specific role of maternal aggression and unavailability in infant development.

One of the major hypotheses of this study concerned the relation between these two critical variables: specifically, we proposed that a mother’s RF in relation to her child would provide a buffer against the emergence of negative cycles of behavior during times of infant distress. Stated another way, we thought that those mothers who were able to openly reflect on their child’s affect and intentions would be better equipped to handle infant vulnerability without becoming overwhelmed by their own unintegrated fear or hostility. This was indeed confirmed by our results. Thus, we can conclude that maternal RF plays a critical role in helping mothers to provide integrated responses to infant distress.

In discussing the implications of the theory of reflective functioning for adult psychotherapy, Fonagy (2000) contends that the ultimate goal of treatment is to help the patient find meaning in his own and other people’s behavior. He suggests that the therapist’s technical efforts and therapeutic stance should be guided by an attempt to help the patient locate himself within the mind of the therapist as an intentional being. In other words, the patient must experience the therapist as someone who thinks about him as a thinking and feeling person. It is
the patient’s internalization of the therapist’s interest in mental states that fosters the patient’s developing curiosity toward the contents and mental processes within his own mind.

This same notion can also be applied to work with parents. Not only can the parent-infant or child psychotherapist demonstrate interest in the mental states of the parent, but she can also show this same curiosity regarding the mental states of the child. The parent and the therapist can struggle together, within the context of a safe and containing relationship, to understand the child’s thoughts, feelings, motivations, and behaviors. As in any good treatment, it is the therapeutic process itself, in addition to the insight that has been gained, that becomes integrated into the patient’s personality and can be utilized in an ongoing way.

Henry Krystal (1988) has written about patients who suffer from alexithymia, or the inability to see their own affects as signals. These patients find affect intolerable, and seek to avoid it by whatever means necessary. The results of this study demonstrate the importance of recognizing and tolerating painful affect not only in oneself, but also in the other. This leads to a further elaboration on the conceptualization of alexithymia, one in which affectively laden mental states, in either the self or the other, are experienced as if they were real threats to the basic well-being of the individual. It is not simply that the child’s distress stimulates similar feelings in the mother, but rather that the mother distorts or projects onto the child’s experience, and the child’s mental states are then felt as if they were real, concrete, physical threats. Thus, the maternal response may be characterized by fearful withdrawal, counter-aggression, or dissociation in order to defend against traumatic impingement upon the basic integrity of the self. Psychoanalytic theorists have described these kinds of behavioral enactments as driven by an underlying dread that has variously been referred to as annihilation, disintegration, or fragmentation anxiety (Bromberg, 1998; Brothers, 1995; Coates & Moore, 1997; Davies & Frawley, 1994; Kohut, 1984; Scharff & Scharff, 1994; Shane, Shane, & Gales, 1997; Winnicott, 1960). This kind of anxiety, by its very definition, is uncontained, unsymbolized, and unavailable to reflective modulation.

Why would the child’s mental states be so disorganizing to the mother? One explanation can be found in the psychoanalytic theory of narcissism (e.g. Kohut, 1977). These dyads may be characterized by a lack of differentiation between the mother and her child. In essence, the child may serve as a narcissistic extension or a self-object for the mother, and thus when the child becomes distressed, it is overly disruptive to her. Furthermore, current psychoanalytic theories of intersubjectivity (e.g. Aron, 1996; Benjamin, 1988, 1998) have focused attention on the patient’s “recognition” of the other. A fully developed capacity for intersubjectivity is characterized by the recognition of the unique subjectivity of the other as separate from oneself. Difficulties with the recognition of the infant’s unique and separate subjectivity lie at the core of low maternal reflective functioning.

A somewhat different psychoanalytic theory of intersubjectivity, which has been proposed by Robert Stolorow and his colleagues (e.g. Stolorow & Atwood, 1992; Stolorow Brandchaft, & Atwood, 1987), is also applicable. Stolorow has developed a theory that highlights the impact of the observer on the observed. Stolorow’s notion of intersubjectivity emphasizes the inextricable nature of the subject from its context. This model presents a radical critique of the classical notion of the “isolated mind” of the infant developing with relatively little impact from the interpersonal surround. Although Stolorow does not reject the notion of dynamic intrapsychic experience, he sees the intrapsychic as existing within, and highly impacted by, the broader environmental context. Thus, for the mother to fully appreciate the intersubjective nature of the parent-child relationship, she must be able to acknowledge the
profound influence that is inherent in what she does, how she thinks, and who she is with her child. Mothers with low reflective functioning are unable to grasp the powerful impact that their thoughts, feelings, and behaviors can have on the infant’s emotional experience.

The application of psychoanalytic intersubjectivity theories to the parent-infant attachment relationship brings attention to an important paradox that is fundamental to the maternal experience. This paradox involves the challenges inherent in the mother’s attempt to reconcile the simultaneous separateness as well as interconnectedness between her own mind and the mind of her child. Therefore, the difficulties that can emerge in attempting to fully engage with the mental states of the infant (at either the representational or the behavioral level) may be related to the mother’s struggle to fully appreciate the strength of intersubjective experience while at the same time remaining aware of the fact of her infant’s separate existence.

The theory of reflective functioning provides one possible explanation of the manner by which some mothers are able to contend with this paradox. If the mother is able to gradually develop an appreciation for her infant’s mental states, then she will become increasingly aware of the uniquely subjective manner by which her child experiences the world. This will enhance her awareness of his separateness, which can ultimately help her to tolerate the intensity of the closeness that is necessary for the optimal development of the infant’s emergent selfhood.

Psychodynamic treatment has always sought to address the gaps in a patient’s narrative or the content that remains unspoken or avoided, as such markers have been understood to represent important areas of psychic conflict that are in need of interpretation and elaboration. However, interventions based on psychodynamic theory have often been criticized for failing to emphasize the problematic behavior of the patient. These findings illustrate the powerful connection between a person’s inner world and their observable behavior in the external world. This research provides substantial support for psychodynamic treatments; particularly those aimed at enhancing the patient’s ability to reflect on mental states in both themselves and in others.

References


George, C., Kaplan, N., & Main, M. (1985). The adult attachment interview. Unpublished manuscript, University of California, Berkeley, Department of Psychology.


