Assessment of Attachment in Infancy and Early Childhood

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Abstract and Keywords

Attachment is a fundamental developmental domain in infancy and early childhood and no clinical assessment is complete without a comprehensive assessment of the young child’s key attachment relationships. This chapter uses the Circle of Security, a graphic representation of the hundreds of daily dyadic interactions that form the basis of attachment in early childhood, to help frame attachment theory. The importance of recognizing child and parent factors that might lead to disorganization of attachment in infancy and early childhood is emphasized and the history of research on forms of reactive attachment disorder is presented in the context of differential diagnosis. Key principles for attachment assessment are then reviewed and the tools that comprise comprehensive assessment of attachment in early childhood are presented, with an emphasis on tools used for assessment of parent-child interaction and those used to gather data on the parental state of mind regarding attachment. The chapter concludes with a case example that includes a discussion of treatment planning.

Keywords: attachment, attachment theory, clinical assessment, reactive attachment disorder, differential diagnosis

No assessment of a young child is complete without considering the quality of that child’s attachment to one or more primary caregivers. Like language or cognitive development, the development of attachment represents a fundamental domain of functioning in humans, and disturbances in the development of attachment can be predictive of later dysfunction. As seen with language or cognitive development, the preschool years are characterized by rapid developmental progression in attachment. Furthermore, in extreme circumstances, a clinician may find that a child meets criteria for a disorder of attachment, just as he or she might meet criteria for a language disorder or cognitive delay. Clinicians must therefore be prepared to routinely assess the quality of a child’s attachment while also keeping in mind the signs and symptoms of disturbed or even disordered attachment.
Although attachment is a central domain of development, it is important to recognize that it is only one piece of a proper clinical assessment in early childhood. Alan Sroufe’s perspective, noted in the following quote, establishes the proper balance:

“It [attachment] is an organizing core in development that is always integrated with later experience and never lost. While it is not proper to think of attachment variations as directly causing certain outcomes, and while early attachment has no privileged causal status, it is nonetheless the case that nothing can be assessed in infancy that is more important. Infant attachment is critical, both because of its place in initiating pathways of development and because of its connection with so many critical developmental functions—social relatedness, arousal modulation, emotional regulation, and curiosity, to name just a few. Attachment experiences remain, even in this complex view, vital in the formation of the person. (Sroufe, 2005, p. 365)

To capture vital attachment experiences, clinicians must both have a strong foundation in the science of attachment and feel comfortable assessing attachment systematically.

This chapter is organized to move from an overview of the development of the theory of attachment to a review of assessment instruments from the perspective of a clinical case. Our first goal is to consider the development of attachment, focusing on key aspects of the history of attachment theory. Next, we will consider the challenge of defining and recognizing disorders of attachment. Finally, by reviewing methods for attachment assessment, we hope to give clinicians direction in ways to approach office assessment. One useful starting point is to connect the clinical rationale for assessing attachment with a brief review of the science underlying the theory of attachment.

Attachment as a Developmental Process

In 1973, Konrad Lorenz was awarded the Nobel Prize in Physiology and Medicine. Lorenz was an ethologist—someone who studies animal behavior. His careful observation of the social behavior of goslings led him to conclude that a process that he dubbed imprinting occurred reliably during a very specific time in each gosling’s early life. Imprinting involved the visual system of goslings; each gosling showed preference for, and sought proximity with, whatever creature happened to be in its visual field during a specific window of development. Lorenz carefully worked out the developmental timing of imprinting and showed that goslings can even imprint on humans: Many psychology textbooks include pictures of Lorenz swimming along, followed by a gaggle of goslings. Lorenz, like many ethologists, considered the meaning of behavior in the context of evolution: Why were goslings "programmed" to imprint in a specific way at a specific time in development? He also considered the implications of his findings for other species, including hu-
mans (Lorenz, 1973). Lorenz’s work, conducted mostly in the 1930s to 1950s, influenced others to consider social behavior in the first years of life among other species.

Harry Harlow, Robert Hinde, and other ethologists studied rhesus monkeys and their work shifted attention to a similar developmental process in primates (Suomi, 2008). Harlow’s experiments, for example, focused on separating baby monkeys from their caregivers. One line of studies showed that the isolated monkeys preferred physical comfort to a food source; they would cling to monkey forms constructed from wire that were covered in cloth even when a non–cloth covered wire monkey with a readily accessible bottle filled with milk was equally available (Harlow, 1958). Further study showed that the social behavior of isolated monkeys was altered by disruptions in maternal care during infancy. For example, isolated monkeys did not show typical behavior with peers and subsequent research helped establish the neurobiological underpinnings of social behavior shaped in the first years of life (Kraemer, 1997; Suomi, 2008).

When John Bowlby elucidated his theory of human attachment in the 1950s and 1960s, he was deeply influenced by the research of Lorenz, Harlow, Hinde, and others (Ainsworth & Bowlby, 1991; Karen, 1994; Suomi, 2008). Bowlby (1969) described attachment as a developmental process that was biologically driven and behaviorally observable. The idea that human infants were programmed to attach to caregivers, a process that Bowlby came to believe was rooted in evolution, was a radical departure from prevailing developmental theories. Though Bowlby was deeply influenced by psychoanalytic theories of development, as he adopted concepts linked to ethology, he moved away from the idea that intrapsychic conflict was a primary influence on infants’ behavior (Steele, 2010). Like Lorenz and Harlow, Bowlby based his theory on observations. Human infants’ social development unfolded more slowly than that of goslings and monkeys, but Bowlby observed that the process of attachment developed in a progression that was consistently timed so that by about 7–9 months of age, infants began to show a strong preference for caregivers with whom they were familiar (Boris, Aoki, & Zeanah, 1999).

Ethological research emphasized observation and Bowlby was keenly interested in data culled from serial observations of human infants. He catalogued observational studies of human infants who were separated from their caregivers or who lacked consistent caregiving (e.g., those raised in institutional care; Bowlby, 1969). Like Lorenz, Bowlby considered issues of timing in attachment, but he also recognized that human infants had minds, not just brains. Even if humans, like other species, were biologically driven to attach, Bowlby believed that repeated interactions between infants and caregivers influenced not just how infants behaved toward their caregivers but also how infants began to think about themselves and what they expected in relationships with others. In fact, he argued that infants develop what he called internal working models of relationships based on these repeated experiences. We will return to the concept of internal working models (which are also sometimes labeled “representations”) later.

When Mary Ainsworth, one of Bowlby’s closest colleagues, began to naturalistically study infant–caregiver attachment, she became interested in key behaviors that led to what
Bowlby had labeled *secure attachment* (Ainsworth & Bowlby, 1991; Karen, 1994; Solomon & George, 2008). Ainsworth systematically observed interactions between caregivers and toddlers, unpacking key elements of the interactive “dance” between caregiver and infant. The concept of sensitive responsiveness was delineated by naturalistic observation: As infants cue for social interaction, the caregiver’s warm and contingent response generates further interactive cueing. At times, an infant’s cues were missed or not responded to, and Ainsworth was able to demonstrate that maternal sensitivity could be cataloged using the same ethological principles underlying the work of Lorenz and Harlow. Ainsworth laid the foundation for successful attempts to reliably rate sensitivity from less sensitive to more sensitive. The field of attachment now has a series of scales with clear behavioral anchors that allow the ranking of caregiver sensitive responsiveness (cf., the Emotional Availability Scales; Easterbrooks & Biringen, 2005). Furthermore, there is evidence across multiple studies that caregiver sensitive responsiveness is predictive of attachment security (Solomon & George, 2008; van IJzendoorn & Sagi-Schwartz, 2008).

The Circle of Security Conceptual Model

One particularly useful clinical and teaching tool is the graphic representation of attachment interchanges captured in the Circle of Security. Figure 11.1 captures “the circle” for toddlers, wherein the top half of the graphic details the process of exploration and the bottom half of the graphic details what happens when the toddler returns to his or her caregiver to be “welcomed in.” The toddler’s “needs” are listed as bulleted points within the boxes on the graphic: As toddlers explore, they may need the caregiver to watch over them, enjoy with them, delight in them, or help them at any given moment. Caregivers who maintain a consistent presence without taking charge of the exploration until the child cues them for help are being developmentally sensitive. Inevitably, the toddler will return to the caregiver, perhaps when startled, frightened, or simply tired, and in these moments the toddler’s need is for delight, comfort, or protection or to have his or her feelings organized. When the toddler gives a signal that he or she needs the caregiver on the bottom of the circle, caregivers who shift from watching over the child to taking charge to assist the toddler are being developmentally sensitive. The caregiver is represented as “the hands” in this graphic: He or she is there to provide for the toddler’s needs and, in doing so, has the opportunity to become the secure base for exploration and the safe haven to which the toddler can return. (Bowlby (1969) coined the descriptive terms secure base and safe haven, emphasizing the young child’s need for safety and security). The creators of the circle have emphasized the concept that to be the hands on the circle for children of different ages, caregivers need only consider being “bigger, stronger, wiser and kind.” Of course, one cannot be a secure base or safe haven without being all of these at once and so, for example, balancing being stronger and being kind becomes one of the challenges of sensitive caregiving (see http://www.circleofsecurityinternational.com for more information on this model).
The circle can be presented to caregivers or used by clinicians as a graphic conceptual model that captures the essence of the ever-functioning attachment system.

![Circle of Security: parent attending to the toddler's needs](image)

*Figure 11.1. Circle of Security: parent attending to the toddler's needs. © Cooper, Hoffman, Marvin, & Powell, 2000.*

No matter what the age, children will go out on the top half of the circle to explore and will return on the bottom half of the circle in some way expressing the need to be welcomed in. In infancy, exploration might consist of turning one’s head and widening one’s eyes to explore a light source and then, perhaps, looking back to the caregiver with a narrowed gaze and a whimper when that light becomes too bright. In toddlerhood, the exploration is motorically more complex—pulling open a cabinet to see what’s inside—while in adolescence exploration might even involve driving. But whatever the mechanics of exploration and return might be, the idea is that children of all ages venture out to explore and return to their caregivers in what could be considered a cycle of circles that never ends. Careful observation of the dance between the caregiver and the child can yield reliable information on the quality of the attachment. Furthermore, specific patterns of attachment are typically evident; these patterns of attachment have been studied in depth for more than 40 years and clinicians should be familiar with assessing dyadic patterns in their practice.

## Patterns of Attachment

Though naturalistic observation is a cornerstone of ethological research, Ainsworth (1978) was also interested in measuring attachment in the laboratory setting. She focused her research on toddlers, recognizing, as depicted in Figure 11.1, that tracking the interactions between child and caregiver both in times of exploration and at moments when the child is in need of comfort yielded information on the functioning of the attachment system. Assessment in the laboratory provided a natural test of response to novelty for the child. By adding the presence of a stranger who approaches the dyad and a brief separation from the caregiver, Ainsworth created a standardized procedure, dubbed the
Strange Situation Procedure (SSP), which would “stress the attachment system” (Solomon & George, 2008).

Ainsworth approached the data from the SSP methodically. She recorded detailed notes on the child’s response to entering a novel room where toys were assembled (Ainsworth, Blehar, Waters, & Wall, 1978; Karen, 1994). Did the child explore or stay near the caregiver and signal for comfort? Did the caregiver engage the child or hold back? A few minutes later, when a member of the team whom the child had not met entered the room, the interactive dance between the caregiver and child was noted further: Did the child signal the caregiver? Move away from the stranger? Become inhibited in play but not signal the caregiver? Likewise, when the caregiver was signaled to leave the room at the prescribed time, how did the child react? And, when the caregiver returned, what did the child do? Approach? Focus on the toys? Withdraw? Protest angrily?

After a process of qualitative analysis of data culled from numerous dyads, Ainsworth was able to identify and name patterns of interactive behavior that were distinct (Ainsworth et al., 1978). Though she had thought that variation in the response to separation might be most telling, the interactions when the caregiver returned to the room were in fact the most revealing. Often, the two postseparation phases of the SSP began with the child in distress. Most children approached the caregiver for comfort, though Ainsworth noted that some were quickly soothed and were able to confidently return to play while others showed angry protest or ongoing distress even as the caregiver worked to comfort them. The group whose distress was soothed by the caregiver and who were able to return to play after reunion was labeled secure. The group whose distress did not resolve even after seeking comfort was labeled ambivalent. A third group showed limited distress at separation and did not seek comfort at reunion; these children seemed focused less on the caregiver than on the toys, and their limited interaction with the caregiver led Ainsworth to use the label avoidant. After more than 3 decades of research, the qualitatively different categories of secure and insecure (either avoidant or ambivalent) have been shown to be reliably identifiable across cultures (though parenting behavior varies within and across cultures in important ways; see van IJzendoorn & Sagi-Schwartz, 2008, for a useful review). Ainsworth’s procedure has influenced developmental science greatly while also providing an important framework for clinical assessment and intervention (Solomon & George, 2008).

While research on attachment steadily grew, research on the perceptual and social capacities of infants and young children grew as well. As methods like microanalytic coding of caregiver–child interactions were coupled with the measurement of physiological variables like heart rate variability or cortisol production, Ainsworth’s qualitative coding could be supplemented by finer grained analysis. Furthermore, Bowlby’s (1944) initial interest in clinical populations influenced others to consider not just the development of attachment and observational measures of attachment quality, but also how attachment might be impacted by social or environmental risk. For example, studying the behavior of infants during the SSP who were difficult to classify revealed that some children’s behavior at reunion did not fit neatly into the original secure or insecure categories of attach-
ment (Main & Solomon, 1990). Instead, some children reacted at reunion with contradictory responses. Some were seen to approach but then shift to avoidance before reaching the caregiver. Others showed signs of apprehension or even fear, perhaps freezing momentarily or looking dazed and uncertain. Main and Solomon (1990) proposed criteria for a fourth category of attachment—disorganized attachment—which captured behavior inconsistent with the more organized behavior that Ainsworth had cataloged. Disorganized attachment is a very important phenomenon. More recent longitudinal studies make it clear that disorganized attachment in the first years of life is a robust predictor of later developmental challenges, including, in some cases, psychopathology (Lyons-Ruth & Jacobvitz, 2008). Disorganized attachment is therefore important for clinicians to systematically assess and recognize, an issue to which we will return later. Before delving into the principles and practice of assessment of attachment, however, it is useful to consider another key aspect of attachment research by examining more fully the construct of internal working models (also called “representations”).

As already noted, Bowlby (1969, 1980) argued that young children develop expectations based on experience; attachment security is not only represented in observable behavior such as calming in the presence of a responsive caregiver, but also internally represented in the mind of the developing child who naturally forms a “working model” of each intimate relationship based on repeated experiences. Whereas Lorenz’s goslings visually attached to a being they saw (either goose or human, as it turned out), Bowlby (1969) recognized that humans had the propensity to catalog experiences and form selective attachments to caregivers, which might vary in quality and might also be represented in the child’s mind differently.

Representations

Bowlby wrote, “Every situation we meet with in life is construed in terms of representational models we have of the world about us and of ourselves” (Bowlby, 1980, p. 229). Bowlby’s (1980) argument was that repeated experiences with caregivers, which can be thought of as repeated trips around the circle (see Figure 11.1), inevitably lead to expectancies based on those experiences. As infants develop, they form relationship-specific representations of each intimate relationship. Furthermore, those representations of relationship with others influence representations about the self such that, for example, toddlers experiencing warmth, protection, and nurturance when on the bottom half of the circle will experience themselves as loved and secure. However, when a caregiver meets an infant’s cues for protection or comfort with false cheer and intrusive attempts to return the infant to exploration, that infant will feel more uncertainty than security and in time may become avoidant. The clinical importance of internal representations, first focused on in the mid-1980s (Main, Kaplan, & Cassidy, 1985), has become clear in the almost 3 decades since research on measuring representations began to mature (Steele & Steele, 2008). A key example of the kind of research that underscored the need to attend to representations in the clinical evaluation of attachment in early childhood was a prospective study, which revealed that classifying a caregiver’s representations regarding
his or her own childhood relationships during pregnancy predicted his or her child’s attachment classification to that caregiver (p. 272) when the child turned a year of age (Fonagy, Steele, & Steele, 1991).

Representations are assessed through interview. As described later in this chapter, structured interviews that ask caregivers to reflect on features of their relationship with their child, or with their own caregivers when they were children, reveal much about the kinds of “expectancies” that Bowlby (1969) wrote about. For the clinician, listening to these expectancies is very helpful in case formulation—representations inform behaviors and understanding how a caregiver thinks about caregiving can often help contextualize that caregiver’s behavior.

Although attachment theory was primarily a developmental theory, Bowlby had a clear interest in clinical populations. In fact, prior to writing his books on attachment, he wrote a seminal paper on “forty-four juvenile thieves” in which he concluded that early life experiences, including disruption in early relationships, influenced later personality formation (Bowlby, 1944; Follan & Minnis, 2010). Still, the progression from recognizing the central developmental role of attachment to the proposition that children might actually develop a “disorder of attachment” early in life took many years. We turn now to considering attachment disorders.

**Attachment Disorders**

Bowlby’s finding that children who experienced early disruptions were more likely to show later externalizing problems, including delinquency, have been replicated (Bowlby, 1944; Hoeve, Stams, van der Put, Dubas, & van der Laan, 2012). Nevertheless, a complex web of early factors influences externalizing behavior and links between early patterns of attachment and later psychopathology are likely mediated by many such factors depending on each child’s circumstances (Pasco Fearon & Belsky, 2011; Green & Goldwyn, 2002). It was not until quite recently that attempts to define disorders of attachment in young children were made. One primary challenge in defining attachment disorders is that attachment is fundamentally an interpersonal process. Defining an attachment disorder as a disease that exists within an individual shifts the clinical focus away from the dyad to the individual child. Still, there is enough evidence that early deprivation leads to atypical attachment behavior in young children to warrant the ongoing attempts to shape reliable criteria for disorders of attachment in childhood (Rutter, Krepner, & Sonuga-Barke, 2009). The history of the attempts to capture criteria for attachment disorders is informative—criteria have shifted as clinical research has informed the field.

**Diagnostic History**

The *Diagnostic and Statistical Manual of Mental Disorders*, third edition (DSM-III; American Psychiatric Association, 1980), first introduced reactive attachment disorder (RAD), a new diagnosis for children who were raised in extreme circumstances. The criteria for
RAD have been slowly revised over the years, but the common theme in all the revisions is that this population of children has been exposed to “pathogenic care.” Webster defines the word *pathogenic* as “causing or capable of causing disease.” This definition puts into perspective the extreme circumstances to which children diagnosed with RAD have been exposed. Such children are often abused, neglected, or switched from caretaker to caretaker. Many children diagnosed with attachment disorders have been institutionalized. From the perspective of the Circle of Security (Figure 11.1), children who meet criteria for an attachment disorder have never had a secure base or safe haven. Instead of experiencing one or more caregivers who have traveled with them around the circle, children who meet criteria for attachment disorders have effectively travelled the circle alone. Their extreme inhibition or disinhibition suggests that they not only lack a coherent strategy for comfort-seeking (as is evident with children who are disorganized), but also have defaulted to either going it alone (in the case of inhibition) or seeking comfort from others, whether they know them or not (as in the case of disinhibition). In fact, it has been suggested that disorders of attachment might better be conceptualized as disorders of nonattachment; affected children show little attachment preference at all and it is this lack of preference that sets them apart.

Early criteria for RAD were critiqued as being difficult to apply clinically (Richters & Volkmar, 1994). One initial issue was the requirement that the diagnosis be made in infancy: In *DSM-III*, the RAD symptoms were required to be present prior to 8 months of age and the disorder was linked to failure to thrive. Given that preferential attachment to primary caregivers is often not clearly evident until 7–9 months of age, accurate diagnosis by 8 months was not possible. Furthermore, research on children with failure to thrive made it clear that such children show varying patterns of attachment, with only a minority meeting the criteria for an attachment disorder (Chatoor, Ganiban, Colin, Plummer, & Harmon, 1998). The failure-to-thrive requirement was dropped in the revised *DSM-III (DSM-III-R)* and the age at which symptoms needed to be evident was expanded to include the first 5 years of life. But even this shift was viewed by some as unnecessarily restricting the number of children who might be diagnosed, especially because gathering early history in children who have moved from caregiver to caregiver is often impossible (Richters & Volkmar, 1994).

By the time *DSM-III-R* was published in 1987 (American Psychiatric Association, 1987), research also revealed that there seemed to be two different groups of children expressing very different symptom profiles. In both *DSM-III-R* and the fourth edition, *DSM-IV* (American Psychiatric Association, 1994), two subtypes of RAD were described—inhibited and disinhibited. The emotionally withdrawn/inhibited type of RAD is characterized by a child who externally shows little or no interest in caregivers. In the *DSM-IV* these children are described as “excessively inhibited, hypervigilant, or highly ambivalent and contradictory [in] responses (e.g., the child may respond to caregivers with a mixture of approach, avoidance, and resistance to comforting, or may exhibit frozen watchfulness)” (American Psychiatric Association, 1994, p. 116). Children with inhibited RAD only inconsistently send cues for comfort from a caregiver when they are on the bottom of the circle. As noted in the criteria, the cues these children give are likely to be
contradictory, mixing the limited signaling of avoidance with, for example, a fearful clinginess. Furthermore, to meet criteria for the inhibited subtype of RAD, affected children must be observed to rarely or never cue for support from known caregivers as they explore on the top of the circle. Children with inhibited RAD show minimal to no positive affect, so there is little delight in exploration nor is there sharing of positive affect when comforted. When they are on the bottom of the circle, affected children may show fear and reticence rather than approaching a caregiver or cueing for comfort. The behavioral profile of children who meet criteria for the inhibited subtype of RAD is consistent with that described among infants and young children who have been maltreated; the biological propensity to turn to a secure base when in need of comfort has effectively been overridden by caregiving that is punitive (Zeanah, 1996).

Rather than being reticent, avoidant, or resistant to comforting, children with the disinhibited subtype of RAD were described in DSM-III-R and DSM-IV as showing “marked inability to exhibit appropriate selective attachments.” Affected children were described as showing “diffuse” attachments; they might easily go off with strangers, and case reports described such children as being intrusive in their interactions. Affected children seem not to be aware of appropriate social and physical boundaries. At the top of the circle, children with disinhibited RAD will explore without checking back with their caregivers, accepting help from strangers rather than cueing a preferred caregiver for assistance. At the bottom of the circle, it is as if affected children see anyone as a safe haven. As described in DSM-IV, the excessive familiarity of affected children was consistent with the kinds of behavior that visitors to orphanages have described for decades: Young children in such institutions approach the entering stranger with arms held up for pickup as if the stranger were a potential caregiver (Zeanah, 2000).

Until recently, systematic research on either subtype of RAD was lacking. To date, only one long-term randomized controlled study informs our understanding of RAD, the Bucharest Early Intervention Project. The Bucharest Early Intervention Project longitudinally compared the outcomes of more than 136 children, all of whom started out living in Romanian orphanages. Children from such orphanages were randomly afforded access to a system of trained and supported adoptive families created as part of a new government effort (Gleason et al., 2011; Smyke et al., 2012). The outcomes of children who were placed with one of the limited number of adoptive homes were compared with that of children who remained in an orphanage, and each cohort was followed serially using attachment-informed measures.

The Bucharest Early Intervention Project showed that children who met criteria for each subtype of RAD at the start of the study follow different courses. Children who had signs of inhibited RAD typically show a large decline in the inhibited RAD symptoms once placed with a family. In fact, no children who met criteria for inhibited RAD when placed in a family care environment continued to meet criteria for inhibited RAD in follow-up (Smyke et al., 2012). As noted, when these children were reevaluated months to years lat-
er, some of the children diagnosed with inhibited RAD who had been placed in foster homes even developed secure attachments.

The Bucharest Early Intervention Project reveals a somewhat different picture over time for those children initially meeting criteria for the disinhibited subtype of RAD. As described in other longitudinal studies of children adopted out of institutional care (cf., Rutter & O’Connor, 2004), indiscriminate sociability is often persistent (Gleason et al., 2011). Although some children who were indiscriminate before placement in a family care environment became less indiscriminate and some even showed signs of a more fully developed attachment with their new caregivers, many continued to be rated as significantly indiscriminate even years after placement. In sum, children who have symptoms of inhibited RAD consistently and rapidly improve when they are removed from institutional care and are put into foster care, whereas children who have symptoms of indiscriminate RAD change less and more slowly when removed from institutional care.

The different courses of the two types of RAD suggest that it is probably more accurate to view the two subtypes as distinct disorders and, therefore, in the fifth edition of the DSM, DSM-5, the label RAD is reserved for those children who are inhibited, and a new label is being created for the disinhibited subtype: disinhibited social engagement disorder. The link between pathogenic care in both of these now separate disorders is retained in the DSM-5 (see Table 11.1).
Table 11.1. Attachment Disorders in the *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition (*DSM-V*)

**DSM-V** criteria for reactive attachment disorder of infancy or early childhood

**A.** A pattern of markedly disturbed and developmentally inappropriate attachment behaviors, evident before 5 years of age, in which the child rarely or minimally turns preferentially to a discriminated attachment figure for comfort, support, protection, and nurturance. The disorder appears as a consistent pattern of inhibited, emotionally withdrawn behavior in which the child rarely or minimally directs attachment behaviors toward any adult caregivers, as manifest by both of the following:

1. Rarely or minimally seeks comfort when distressed.
2. Rarely or minimally responds to comfort offered when distressed.

**B.** A persistent social and emotional disturbance characterized by at least two of the following:

1. Relative lack of social and emotional responsiveness to others.
2. Limited positive affect.
3. Episodes of unexplained irritability, sadness, or fearfulness that are evident during nonthreatening interactions with adult caregivers.

**C.** Does not meet the criteria for autistic spectrum disorder.

**D.** Pathogenic care as evidenced by at least one of the following:

1. Persistent disregard of the child’s basic emotional needs for comfort, stimulation, and affection (i.e., neglect).
2. Persistent disregard of the child’s basic physical needs.
3. Repeated changes of primary caregiver that prevent formation of stable attachments (e.g., frequent changes in foster care).
4. Rearing in unusual settings such as institutions with high child-to-caregiver ratios that limit opportunities to form selective attachments.

**E.** There is a presumption that the care in Criterion D is responsible for the disturbed behavior in Criterion A (e.g., the disturbances in Criterion A began following the pathogenic care in Criterion D).

**F.** The child has a developmental age of at least 9 months.
**DSM-V criteria for disinhibited social engagement disorder**

**A.** A pattern of behavior in which the child actively approaches and interacts with unfamiliar adults by exhibiting at least two of the following:

1. Reduced or absent reticence to approach and interact with unfamiliar adults.
2. Overly familiar behavior (verbal or physical violation of culturally sanctioned social boundaries).
3. Diminished or absent checking back with adult caregiver after venturing away, even in unfamiliar settings.
4. Willingness to go off with an unfamiliar adult with minimal or no hesitation.

**B.** The behavior in Criterion A is not limited to impulsivity as in attention-deficit hyperactivity disorder, but includes socially disinhibited behavior.

**C.** Pathogenic care as evidenced by at least one of the following:

1. Persistent failure to meet the child’s basic emotional needs for comfort, stimulation, and affection (i.e., neglect).
2. Persistent failure to provide for the child’s physical and psychological safety.
3. Persistent harsh punishment or other types of grossly inept parenting.
4. Repeated changes of primary caregiver that limit opportunities to form stable attachments (e.g., frequent changes in foster care).
5. Rearing in unusual settings that limit opportunities to form selective attachments (e.g., institutions with high child-to-caregiver ratios).

**D.** There is a presumption that the care in Criterion C is responsible for the disturbed behavior in Criterion A (e.g., the disturbances in Criterion A began following the pathogenic care in Criterion C).

**E.** The child has a developmental age of at least 9 months.

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**Beyond Attachment Disorders: Other Clinically Significant Patterns**

Just as recent research has informed our understanding of the course of attachment disorders while also helping to revise the criteria for these disorders, developmental research that is focused on deepening our understanding of patterns of attachment has in-
formed the clinical realm. Much of the focus of this research has been on disorganized attachment in infancy and early childhood and the development of psychopathology. As discussed previously, Main and Solomon (1990) reviewed videotapes of the SSP and described several behaviors signaling disorganized attachment. For example, infants and toddlers who showed contradictory behavior (e.g., approaching and then shifting to avoiding the caregiver without completing the approach), misdirected or stereotypical behavior, stilling and freezing at separation or reunion, and showing direct apprehension or even fear of the caregiver were coded as disorganized. From the perspective of the Circle of Security, disorganized attachment reflects persistent challenge with the caregiver’s capacity to be the hands for the child. Toddlers who experience caregivers as inconsistent, particularly when they need protection, comfort, or to have their feelings organized at the bottom of the circle, become uncertain. When their needs are sometimes met with withdrawal or rejection, they may try to inhibit their own responses, even when they most need the caregiver. Research makes it clear that disorganized attachment is associated with significant family risk factors from parental psychopathology or substance abuse to family violence (Cyr, Euser, Bakermans-Kranenburg, & van Ijzendoorn, 2010). Further, both specific caregiver behaviors and specific features of caregiver representations about their own history of being cared for are associated with disorganized attachment (Lyons-Ruth & Jacobvitz, 2008). Because indices of disorganization can be subtle, those clinicians who evaluate infants and young children at high risk would do well to study the literature on attachment disorganization and even seek training in identifying attachment disorganization in clinical populations.

As methods like the SSP were applied to children in the preschool period (from 30 to 60 months of age), the MacArthur study group identified children whose behavior toward the caregiver was somewhat more organized and yet still concerning (Cassidy, Marvin, & the MacArthur Work Group on Attachment, 1992). Instead of showing what might be considered a fragmentary response following the stress of separation (e.g., freezing momentarily before indirectly expressing a need for comfort at the start of a reunion), some older children responded upon reunion with their caregivers by taking control of the situation. Two patterns of what was deemed role reversal emerged: controlling, caregiving and controlling, punitive. In the former pattern, the child showed caretaking behavior—for example, pretending to cook for the caregiver while he or she was gone and then “serving” the caregiver upon reunion as if the child were there to make the caregiver feel comfortable. Alternatively, some children took control by being bossy—challenging the caregiver on reunion angrily or fighting with him or her at the time of separation. Though the phenomenon of role reversal had been noted for many years in the family systems literature, the presence of reliably coded behavior such as this in children as young as 3 years of age was an important finding (Bellow, Boris, Larrieu, Lewis, & Elliot, 2005).

Longitudinal research on attachment disorganization is yielding important results. For example, the National Institute of Child Health & Human Development Study of Early Child Care and Youth Development studied 1,364 children prospectively over a 5-year period (O’Connor, Bureau, McCartney, & Lyons-Ruth, 2011). The study revealed that children classified as having disorganized attachment with a primary caregiver at 36 months...
One of the most well-known longitudinal studies on attachment is the Minnesota Longitudinal Study, which began in 1977 (Sroufe, Egeland, Carlson, & Collins, 2005). This seminal study followed a cohort of children over decades, providing data on the links between early attachment and later outcomes. Among the most important findings of this study was that disorganized attachment in the preschool period was associated with dissociation in early adulthood (Ogawa, Sroufe, Weinfeld, Carlson, & Egeland, 1997). Remarkably, these longitudinal data have been replicated and extended with another cohort—this time composed of children at considerable social risk (Lyons-Ruth, Dutra, Schuder, & Bianchi, 2006). Once again, early disorganization was associated with later dissociation. In sum, these data suggest that when caregivers are repeatedly unable to modulate their infant’s arousal, the child’s capacity to self-regulate over time is impaired and dissociation may develop. As elegantly laid out by Lyons-Ruth and colleagues (Lyons-Ruth et al., 2006), when viewed in light of data on the impact of fearful arousal on physiologic systems known to be important in the development of self-regulation, these longitudinal data offer insight into pathways that begin early in life and have far-reaching impact on developmental outcomes. Disruptions in dyadic affective regulation are of particular importance, and clinical attention to these processes is part of what attachment assessment is all about. As noted by Liotti (1992), there are many possible pathways linking early disorganization and later dissociation, but the links established by these two important longitudinal studies underscore the importance of identifying early disorganization.

Much like disorganized attachment in infancy, the development of role reversal in the toddler and preschool period appears to be associated with long-term negative outcomes. Although there is not yet longitudinal research on early role reversal, Macfie, McElwain, Houts, and Cox (2005) looked at the intergenerational cycle of role reversal and how this cycle can be passed down through the generations. Macfie et al. recruited and enrolled first-time parents who were in prenatal classes in the southeastern United States and collected data at 3, 12, 24, 60, and 70 months from 138 families. The data revealed links between the caregivers’ own experiences with their childhood caregivers (as determined by coding of their responses to questions from the Adult Attachment Interview) and their offspring’s expression of role-reversed behavior during an interactive task completed when the children were about 24 months of age. As summarized in Macfie et al.’s (2005) study,

Both fathers and mothers who reported role reversal in childhood with their own mother saw the pattern repeated in the next generation: Mothers who experienced a role reversal with their own mother were more likely to be in a role reversal with their daughter at 2 years of age; and fathers who experienced a role re-
versal with their own mother were more likely to marry women who were in a role reversal with their son at 2 years of age. (p. 61)

These intriguing findings underscore the powerful influence of caregivers’ early experiences and how those experiences influence the choice of mates (in the case of the fathers in this study) or how they themselves interact with their children (in the case of the mothers in this study).

Neither attachment disorganization nor role reversal is thought of as a clinical diagnosis, though the concept of a role-reversed attachment disorder has been presented (cf. Boris et al., 2004). Instead, they should be considered red flags that indicate that the practitioner should both conduct a comprehensive evaluation of family risk factors and strongly consider intervention. Physical abuse, sexual abuse, divorce, and parental substance abuse have been associated with both attachment disorganization and role reversal (Mayseless, Bartholomew, Henderson, & Trinke, 2004).

From the perspective of the circle (Figure 11.1), both disorganization and role reversal can be traced to caregivers’ struggles to meet their child’s needs around the circle. As previously mentioned, children need their parents to be “bigger, stronger, wiser, and kind.” Both disorganization and role reversal represent consistent failure of the caregiver to balance these four capacities in meeting the child’s needs. Research suggests, for instance, that caregivers who behave in ways that are frightening (e.g., being stronger without being kind and reacting punitively when, for example, a toddler has tantrums) have children who are more likely to be classified as disorganized. Likewise, when the caregiver “collapses,” by showing fear of the child or withdrawing when the child needs comfort (e.g., failing to be bigger and wiser), disorganization is more likely to occur (Out, Bakermans-Kranenburg, & van IJzendoorn, 2009). Role reversal occurs when, instead of providing for the child’s emotional needs, the young child is expected to fulfill an emotional need of the parent. It is not uncommon for caregivers of children who are role reversed to be kind, but struggle to take charge to meet the child’s needs, even when some discipline (e.g., acting stronger) would help the child regulate. Often, role reversal is picked up not just by review of interactive behavior, but also by paying attention to how the caregiver talks about his or her relationship with the child; caregivers who talk about how their child has a special ability to soothe the caregiver when the caregiver is emotionally distressed are likely to be promoting role reversal. In the first two columns of Table 11.2, some examples of the kinds of expressions of caregiver working models of behavior that would be important to capture in assessment of either disorganization or role reversal are listed.
Table 11.2. Clinical Aspects of Significantly Disturbed Attachment Using the Circle of Security Framework

<table>
<thead>
<tr>
<th>Caregiver representation</th>
<th>Caregiver behavior</th>
<th>Child behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributions about the child are:</td>
<td>On the top half of the circle, the caregiver:</td>
<td>On the top half of the circle, the child:</td>
</tr>
<tr>
<td>- negative to a degree that derogation—direct expression of anger about the child’s needs—breaks through;</td>
<td>- reads cues poorly so that he or she:</td>
<td>- shows little delight and may miscue that he or she is disinterested in the caregiver;</td>
</tr>
<tr>
<td>- marked by distortion, such that the child’s needs are characterized as hurtful, frightening, or overwhelming; in some cases, the child is seen as primarily responsible for the caregiver’s distress or the picture of the child is lost in the caregiver’s own issues or in marked tangential responses that are not about the relationship;</td>
<td>a. has difficulty watching over the child; will either take charge by intruding or withdraw; or do both unpredictably;</td>
<td>b. misses help-me moments:</td>
</tr>
<tr>
<td>- generically positive (e.g., ”loving” or “caring”) and yet the story of the relationship is characterized by extreme disengagement such that the caregiver struggles to find language to talk about the child’s needs and seems disinterested.</td>
<td>- restricts the child’s exploration through intrusion, pressuring to achieve, or teasing;</td>
<td>- may be hypervigilant, such that tracking the caregiver will supplant exploration.</td>
</tr>
<tr>
<td>The tone of the interview:</td>
<td>- rarely delights in or enjoys with the child.</td>
<td>On the bottom half of the circle, the child:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>On the bottom half of the circle, the caregiver:</td>
</tr>
<tr>
<td>- may be marked by indifference or disappointment;</td>
<td>- may respond to cues for comfort or protection by:</td>
<td></td>
</tr>
<tr>
<td>may be shaped by moments of anger or hostility;</td>
<td>a. simply avoiding or rejecting the cue or</td>
<td></td>
</tr>
<tr>
<td>may be colored by guilt or shame.</td>
<td>b. exhibiting harsh or mocking affect or tone of voice;</td>
<td></td>
</tr>
<tr>
<td>The caregiver’s capacity to have insight into the child’s experience:</td>
<td>- responds to cues that the child needs his or her feelings organized by:</td>
<td></td>
</tr>
<tr>
<td>is limited such that the caregiver shows little capacity to imagine what the child is feeling;</td>
<td>a. ignoring or rejecting the child’s cue;</td>
<td></td>
</tr>
<tr>
<td>- stage-salient issues like negotiating separation or starting toilet training are likely to be experienced as burdensome or overwhelming or even uninteresting;</td>
<td>b. behaving as if the child’s need is overwhelming or irritating; or</td>
<td></td>
</tr>
<tr>
<td>challenges with independence will be blamed, at least in part, on the child.</td>
<td>c. begging or pleading with the child rather than being calming.</td>
<td></td>
</tr>
<tr>
<td>The caregiver’s memories about the child: are few;</td>
<td>The caregiver’s hands are characterized by:</td>
<td></td>
</tr>
<tr>
<td>- lack detail, positive emotion and richness; no autonoetic awareness;</td>
<td>- seeks proximity by approaching strangers or simply withdraws from caregiver showing fear, confusion, or even dissociation;</td>
<td></td>
</tr>
<tr>
<td>- are contradictory such that, for example, specific memories of the child described as loving focus instead on the child being manipulative or difficult.</td>
<td>- organize-my-feelings moments may look extreme, such as exhibiting self-endangering behavior or periods of defiance;</td>
<td></td>
</tr>
<tr>
<td>Other features of the interview:</td>
<td>- attempts to miscue through organize-my-feelings moments will break down into tantrums, which are difficult to extinguish;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- the child may be overbright or solicitous, as if trying to set the emotional tone of the interaction, particularly at reunion.</td>
<td></td>
</tr>
<tr>
<td>- moments of confusion or even dissociation may be evident;</td>
<td>- being only bigger and stronger (without being kind) or being weak and withdrawing in fear or helplessness.</td>
<td></td>
</tr>
<tr>
<td>- previous experience of loss or trauma may be talked about even if not clearly related to the interview question.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The caregiver is unable to provide a secure base and cannot consistently provide a safe haven. Relationships in this range are marked by serious concerns in all areas such that immediate intervention is warranted. For many dyads in this range, involvement of Child Protective Services or use of intensive in-home services should be considered. Not only are the caregiver’s representations of the child concerning, but also his or her behavior toward the child is grossly insensitive; moments of positive interactions are not sustained. The child, in turn, shows concerning behavior on one or both sides of the circle. While the caregiver may voice concerns about the relationship with the child, the capacity to recognize the child’s needs around the circle is lacking. Family stressors are likely to be high and the child’s safety and developmental trajectory are of great concern.

### Other Diagnoses to Consider

At first glance, other diagnoses share some features with attachment disorders or disturbances. The expression of reticence and difficulty with social reciprocity in children with inhibited RAD can resemble pervasive developmental disorder (Rutter & O’Connor, 2004). A history of pathogenic care is required for RAD and is helpful when differentiating the two diagnoses. Furthermore, children with inhibited RAD do not have difficulties with symbolic play, have stereotypies, or show the kind of restricted or repetitive interests that children with pervasive developmental disorder often display. Finally, for children to be diagnosed with pervasive developmental disorder, they must have language delays, which is not a diagnostic feature of RAD (American Psychiatric Association, 2000).

Another example of an on-the-surface look-alike is attention-deficit hyperactivity disorder and indiscriminate RAD. Although children with indiscriminate RAD can appear impulsive, particularly in seeking interaction with strangers, such children do not generally show marked hyperactivity in multiple settings. Furthermore, the diagnosis of attention-deficit hyperactivity disorder does not limit a child from forming an attachment toward a caregiver, and children with this disorder almost always show clear preference for a primary attachment figure. Nevertheless, some data indicate that children raised in orphan-
ages are at risk for both RAD and attention-deficit hyperactivity disorder and, in children who have come from such settings, the possibility that the child has both disorders must be considered (Gleason et al., 2011). As is true for all clinical diagnostic work in early childhood, a key to making an accurate diagnosis is a good assessment, and we turn now to principles of assessment and key instruments used in the assessment process.

Assessing Attachment

In this section, we will first outline some key principles in assessment of attachment and draw a distinction between providers who are generalists and those who have more specialized training in attachment assessment. Following that, we will review some of the instruments used in practice and note those most appropriate for use by generalists versus specialists. We will then describe a case that might present to a specialty clinic and discuss how various findings from a more comprehensive assessment might inform diagnosis and treatment.

Key Principles in Assessment

Assess Relationships Individually

A first principle in assessment is to remember that attachment is generally relationship specific, so a single child may have different attachment patterns with different caregivers. Therefore, it is often useful to consider a child’s attachment to all caregivers who consistently interact with a given child and to assess those relationships individually. For example, a child may be clingy and fearful of separation from one parent and comfortable with separating from and reuniting with the other parent.

Investigate Both Behavior and Representations

As already detailed, attachment is manifest both in behavior (e.g., how an infant and caregiver respond to one another’s behavior) and in representations (how interactive experiences are translated into working models of relationships). Thorough assessment typically involves considering both behavior (ideally through direct observation) and representations (generally through a particular type of caregiver interview).

Diagnosing Attachment Disorders Requires Application of Published Diagnostic Criteria

Disorders of attachment, though rare, follow specific patterns and require clinical diagnostic interviews tied to established criteria. How the child responds not just to their caregivers but also to unfamiliar adults must be documented, preferably by observation.

Attachment Assessment Is Typically Only Part of a Comprehensive Assessment

In many cases, particularly those involving children who are at risk for disorganized attachment, role reversal, or a disorder of attachment, it is important to take a thorough history, specifically including the child’s developmental history, abuse
and neglect history, and any changes in caretakers. A developmental screen is recommended because delays in a child’s development may influence how the child communicates, cues, and uses a caretaker as a secure base.

As Sroufe’s (2005) quote at the start of this chapter underscores, no developmental domain is more important in early childhood than attachment. The discipline of infant mental health has become increasingly specialized as the field embraces findings from research and as new and more sophisticated interventions are developed. Practitioners who have introductory training in infant mental health but have not yet had access to more specialized training in, for example, identifying disorganized attachment or treating families whose young children have been referred to the child welfare system for suspicion of abuse or neglect might be considered generalists. Those who have more extensive training and experience—for example, practitioners who are familiar with using comprehensive assessments to inform attachment-based dyadic therapy—are considered specialists. Table 11.3 highlights some of the differences between generalists and specialists. For many reasons, it is important that practitioners practice within their scope of training. There is good reason for generalists to work toward becoming specialists: The more specific training a provider gets in assessing attachment, the more able that provider will be to apply assessment to intervention.
Table 11.3. Differentiating Providers and Their Level of Experience and Training

<table>
<thead>
<tr>
<th>Generalist</th>
<th>Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Early intervention training and familiarity with attachment theory</td>
<td>• Advanced training in infant mental health</td>
</tr>
<tr>
<td>• Works with families at moderate risk; consults early intervention programs</td>
<td>• Works with highest risk families (e.g., those with internationally adopted children or those in the child welfare system)</td>
</tr>
<tr>
<td>• Familiar with attachment patterns from secure to disorganized but no formal training</td>
<td>• Trained in classifying attachment patterns (infant, preschool, or both systems)</td>
</tr>
<tr>
<td>• Uses general clinical interview rather than narrative interviews</td>
<td>• Trained in the use of narrative interviews like the Working Model of the Child Interview or the Adult Attachment Interview</td>
</tr>
<tr>
<td>• Supportive treatment provider with limited training in dyadic therapy</td>
<td>• Experienced dyadic therapist</td>
</tr>
</tbody>
</table>

Tools for assessing attachment include caretaker–child interactions, interviews, and questionnaires. There are no simple screening instruments for attachment, and for both generalists and specialists a combination of observational and interview methods inform assessment. Using the Circle of Security model as a framework for working through the child’s exploration and return to the caregiver, as well as to track the caregiver’s responsiveness to the child’s needs, is helpful no matter what assessments are used. There are structured (e.g., the SSP, the Crowell procedure) and unstructured (interview questions and unstructured observation) methods of assessing a dyad’s attachment. Most of the structured assessments require training both to conduct them efficiently and accurately and to interpret the data generated, although the degree of training and consultation needed varies.
Interaction Procedures

Until about 4 years of age, a child’s attachment pattern can only be reliably inferred from his or her behavior. Observing interactions between a child and caretaker typically yields a great deal of information about how a dyad communicates, what a child expects from a caretaker, how a child uses a caretaker to resolve stress and dysregulation, how a caretaker anticipates and responds to a child’s needs, and how the dyad resolves emotional distress together. As the infant or young child moves out to explore on the top half of the circle, the caregiver’s capacity to watch over and enjoy with the child can be tracked (see Figure 11.1). To assess interactions on the bottom half of the circle, it is typically necessary to place some stress on the caretaker-child dyad. By asking the child to learn a difficult new task or separate from a caregiver, the natural tendency to turn to the caregiver and express bottom-half needs will likely occur. The caregiver then will have the opportunity to show his or her capacity to be a safe haven or secure base for the child. Whether the clinician is using a formal interaction procedure or an unstructured observation, he or she should be aware of what attachment behaviors to look for at what age because, for example, a 9-month-old child’s behavioral repertoire will be vastly different from that of a 24-month-old child. The last column in Table 11.2 highlights the kinds of behaviors at the top and the bottom of the circle that would be clinically concerning for toddlers.

Most specialists in the area of attachment assessment use standardized interaction procedures. The Still Face Paradigm (Tronick, Als, Adamson, Wise, & Brazelton, 1978), the SSP (Ainsworth et al., 1978), and the Caregiver Child Structured Play Interaction (also called the Crowell procedure after one of its creators; Aoki, Zeanah, Heller, & Bakshi, 2002) are examples of such procedures and all have a research base. All require toys, timers, a playroom with a one-way window, and an observation room. Additionally, to perform the procedures seamlessly, each of these assessment procedures typically requires an assistant for the clinician. Because a clinician should assess the child with more than one caretaker present, the clinician must possess and store several age-appropriate toys and tasks, because the tasks should be novel to each procedure. Furthermore, videotaping each of these procedures is strongly recommended because postvideo review is critical for fully capturing the moment-to-moment interactions that inform the clinician. That being said, these standardized procedures yield a wealth of information regarding the child’s attachment behavior. Each one can be completed in about 30 minutes. The video from the assessment can be used in therapy with the dyad (if therapy is recommended after the assessment) and gives the clinician the opportunity to provide the caretaker with concrete feedback on the dyad’s interaction (Rusconi-Serpa, Rossignol, & McDonough, 2009). Furthermore, the assessment tool chosen can be repeated at the end of therapy or during the course of therapy to monitor progress. Most important, because each of these procedures pulls for the behaviors most related to attachment, each one can assist in any kind of attachment assessment, including one focused on attachment disorders. What follows is a review of a select group of key standardized procedures, beginning with those...
used for toddlers and preschoolers and then those adapted for use with infants who are not yet mobile.

**The Strange Situation Procedure**

The SSP was developed by Ainsworth and colleagues (1978). It begins with a child and caretaker playing with toys together in a room (presumably, the room is novel to the child). After 3 minutes, a stranger enters the room and sits quietly near the dyad. After about a minute, the stranger engages in small talk with the caretaker and then engages the child for a minute or so before the caregiver leaves. If the child is not overly distressed, the caregiver returns in 3 minutes and the stranger leaves as quickly and unobtrusively as possible after the caregiver and child have reunited. (If the child is significantly distressed, the caregiver is instructed to return shortly after leaving.) After another 3 minutes of play, the caregiver again leaves the room, with the child remaining in the room alone with the toys. If the child is calm, another 3 minutes are allowed to elapse before the stranger returns to the room. (If the child is not calm, the stranger returns quickly to attempt to soothe the child.) Finally, the caregiver returns to the room again and engages in play with the child, which completes the procedure. Each shift in the procedure happens at 3 minutes unless the child is so distressed that a particular episode must be cut short.

From the start, the SSP affords the clinician the opportunity to observe the child when his or her attachment system is activated. Simply being in a novel room may trigger attachment behavior, especially in toddlers. The introduction of the stranger also is designed to activate the child’s attachment system, allowing the clinician to gather information on how the child reacts to strangers and how the child uses the caregiver in the presence of a stranger. Finally, the two separations further activate the child’s attachment system and set up the key moments of the procedure, the reunions. Table 11.2 presents a sketch of what disturbed attachment might look like interactively (see the second and third columns for the kinds of behaviors the caregiver and child might show).

**The Crowell Procedure**

The Crowell procedure shares key elements with the SSP. Like the SSP, the Crowell procedure includes specific segments that are conducted in standard order and are typically timed. Also like the SSP, it begins with free play and has a separation and reunion (though the Crowell procedure has only one separation and reunion compared to the SSP’s two). What is different with the Crowell procedure is the use of bubble play, a clean-up task, and a series of teaching tasks, each of which provide different kinds of interactive data.

The Crowell procedure’s segments are ordered as follows: free play, clean-up, bubble play, teaching (p. 281) tasks, separation, and reunion (Aoki et al., 2002). Each segment has specific time intervals, and the clinician guides the progression of the procedure by calling the caregiver by phone from the observation room. In free play, the caregiver and child play with a set of standardized, although common, toys (e.g., doctor’s kit, baby...
The nature of the dyad’s play is important: The clinician can track the play using the Circle of Security (Figure 11.1) to ascertain how comfortable the caregiver and child are with each other, whether playing together appears to be a familiar event for the dyad, and whether any themes are evident in the play and whether there is turn-taking, shared affect, and positive interactions. For the clean-up segment, the caregiver is instructed to have the child clean up the toys, and the toys are removed from the room by a clinician. How caregivers give instructions or directions can be observed and the level of compliance in the child is easily tracked. Clean-up can shift a child to the bottom of the circle such that his or her feelings need to be organized by the caregiver. During bubble play, the caregiver and child blow and pop bubbles. The bubble segment gives the dyad an opportunity to share moments of positive emotion, because most young children enjoy bubbles. Next are four teaching tasks, which progress from being easy enough for the child to do individually to challenging enough that the child should require assistance and/or collaboration from the caretaker. The teaching tasks pull for assistance-seeking behavior from the child as the tasks become more difficult and for scaffolding behavior from the caretaker as the child learns the task. For the separation segment, the caregiver is asked to leave the room but is able to watch the child from the observation room. While the caregiver is out of the room, the child’s attachment system is activated. The caregiver is sent back to the room after a few minutes for the reunion. (If the child begins to cry, the caregiver is sent back immediately.) During the reunion, the child’s attachment behavior can be observed, such as seeking proximity to the caregiver or expressing relief that the caregiver has returned and possibly anger at being left alone, as well as how the child’s distress is resolved. As noted in Table 11.2, the interactive behavior on the top and the bottom of the circle can yield important data on where the dyad struggles, with some dyads looking quite disturbed.

The Crowell procedure requires the kind of resources, including space, training, equipment, and toys, that infant mental health specialists likely possess. The teaching tasks should be novel to the child, so the clinician should have many tasks at hand when assessing a child with multiple caregivers. Also, the procedure is best completed when there is more than one clinician present. Nonetheless, the Crowell procedure yields a tremendous amount of information about how the caregiver and child communicate, cue, problem-solve, and resolve distress with each other. The Crowell procedure has both clinical interpretation and research coding systems. The procedure works well for children ages 12 to 72 months.

### Baby Crowell

The Crowell procedure as adapted for children approximately 7 to 12 months of age is referred to as the Baby Crowell (BC). The BC includes free play, a stranger interaction with caregiver present, teaching tasks, separation, and reunion. The child must be able to sit up unaided and preferably be crawling. In the free play segment, the parent and child play with a small number of developmentally appropriate baby toys, such as rattles, texture toys, and teething toys. This segment allows for a great deal of shifting between the top and bottom of the circle, as the child explores the toys with and without support of
the parent. After free play, a stranger enters the room and sits near, but not with, the parent. First, the stranger sits quietly for a minute, and then the stranger and parent engage in small talk for a minute. The stranger then joins the parent and child and the stranger attempts to engage the child in play for 3 minutes, while the parent sits quietly and withdraws from the play. This is designed to give the child an opportunity to demonstrate referencing the parent regarding safety, stranger wariness, or indiscriminate behavior and seeking proximity for safety. The stranger leaves and the parent moves on to bubble play. The bubbles segment gives the dyad an opportunity reengage and to experience shared positive emotion. There follow two short, developmentally appropriate teaching tasks—tasks that give the clinician information about how the dyad experiences new situations and learning together. After the teaching tasks, there is a short separation, which places the child at the top of the circle and without the hands of the parent. When the parent returns to the room, the child’s attachment system should be fully activated, and the baby’s, and possibly the parent’s, distress must be resolved. The baby is expected to move to the bottom of the circle and seek proximity, organization of his or her feelings, comfort, and safety. As with the Crowell procedure, the BC also requires space, training, equipment, and toys.

(p. 282) **Still Face Procedure**

The Still Face Procedure has three segments: interaction, stilling, and interaction (Tronick et al., 1978). For the infant, these segments are analogous to free play (when the caregiver is instructed to play with the infant—typically by sharing affect and having a “conversation”), which is then interrupted by a “separation” (in which the caregiver is instructed to adopt a neutral expression and not interact at all) followed by a “reunion” (when the caregiver is instructed to reconnect with the child and play again). During the still face phase, the infant is placed in a safe position (e.g., an angled car seat) so that the infant and caregiver are face to face. Here, the dance around the circle, the exploration that the infant naturally conducts and his or her “return” to the caregiver, is conducted through processes such as locking gaze and then breaking free. Attending to the rhythm of the interactions as the caregiver and infant “play” gives way to attending to the infant’s reaction to the caregiver’s sudden unavailability during the still face phase. Often, the unexpected and seemingly sudden withdrawal of the caregiver’s full attention and affect leads to distress in the infant. How the dyad “reregulates” when the caregiver is instructed to move back into play is important to note. Is the infant’s distress quickly soothed by the caregiver’s calm and steady response? Or does the caregiver move in too quickly, pushing the reconnection and leading the infant to become even more distressed?

At a minimum, the clinician must be free to carefully observe the faces of both caregiver and infant simultaneously; without the use of videotaping, this can be difficult to do without interfering with the dyad. Fortunately, capturing both members of the dyad on camera can be accomplished using a single camera and a mirror placed behind the infant that captures the caregiver’s face. Research on the Still Face Paradigm makes it clear that moment-to-moment interactions are telling, and the development of microanalytic coding of
Assessment of Attachment in Infancy and Early Childhood

Facial expressions has helped to establish that these early interactions predict later attachment behavior during procedures like the SSP (Beebe et al., 2010).

Nevertheless, what can be harder to capture from any of the interactive procedures is the caregiver’s representational world. As already noted, the ways in which a caregiver’s own experiences influence their interactions with the child are part of a comprehensive assessment of attachment, and specialists make sense of what they observe by using structured interviews to listen to caregivers talk about their attachment experiences. In fact, the advent of interviews that focus on either specific behaviors of the child or the representational features of the caregiver regarding the relationship with the child is a major advance in the field.

Interviews

Interviewing caregivers about their children’s attachment behaviors and about how they view their children’s personality, relationships, and behaviors is often a critical part of assessing attachment. Understanding how the caregiver anticipates and interprets the child’s behavior and what meaning he or she attaches to those behaviors is important not only in deciding whether and how a child’s attachment may be disturbed, but also for treatment planning for the child and dyad. Two types of interviews are used: diagnostic interviews, which specifically focus on symptoms of attachment disorders, and narrative interviews, which specifically focus on caregiver representations. We will begin with an example of a diagnostic interview.

Disturbances of Attachment Interview

The Disturbances of Attachment Interview is a semistructured interview that allows the clinician to assess for signs of inhibited RAD and disinhibited attachment disorder (Smyke et al., 2012). The clinician begins with global questions and then asks increasingly specific follow-up questions to determine how an item will be scored. For example, the caregiver is asked what the child does when scared or upset. Follow-up questions include whether the child seeks comfort, waits to be comforted, or does not cue for comforting; from whom the child seeks comfort; whether the child would seek comfort from a stranger; and how the child responds when comfort is offered. These questions address how the child responds in bottom-of-the-circle instances. Additionally, the caregiver is asked about top-of-the-circle moments, such as whether the child talks back and forth with the caregiver or shows the caregiver objects he or she has found or things he or she has done and whether the child would go off with the stranger. The interview allows the clinician to use his or her own experience with or observations of the dyad in scoring. This interview requires minimal training to complete and score and yields a great deal of information about the child’s attachment behaviors as reported by a caregiver. One area of concern in administering the interview is the ability of the caregiver to accurately report the child’s behaviors. For example, a caregiver may say (p. 283) that a child would never go off with a stranger, but the child was observed to happily and easily walk away...
from the parent with a stranger in the waiting room without referencing the caregiver or looking for the caregiver after several minutes. While it is useful to video or audio record the interview, such recording is not necessary.

**Working Model of the Child Interview**

The Working Model of the Child Interview is a semistructured interview that examines a caretaker’s internal representation of his or her child, including the child’s personality and the caretaker’s relationship with the child (Benoit, Zeanah, Parker, Nicholson, & Coolbear, 1997). This interview provides a great deal of information about how the parent sees and interprets the child’s cues and a variety of personality and behavior states and traits of the child. The coding system allows for categorizing caregivers’ responses, which indicate whether the parent has a reasonable and coherent representation of the child or a more problematic representation that may affect how they then respond or do not respond to their children’s cues. For example, a caregiver who has a typical representation of a 24-month-old may describe the child as curious and wanting to learn all the time, while a caregiver who is struggling may say the child is intrusive, asks too many questions, and is “too big for his britches.” Table 11.2 presents examples of the kinds of interview responses that are clinically concerning. The data from interviews capturing the caregiver’s reflections on relationships are critical to understanding something about a caregiver’s psychological defenses. Interviews often also highlight treatment goals for the dyad. Interviews like the Working Model of the Child Interview require a moderate amount of training to correctly administer and clinically interpret. Video recording is recommended because the congruence between what is stated and what is given with nonverbal cues can assist in the interpretation of the data. Because these interviews generate a lot of data, at a minimum they should be audiotaped to allow review and afford the interviewer the opportunity to focus on the flow of the interview.

The Working Model of the Child Interview is only one of many interviews capturing data on caregiver representations. Other interviews, such as the Adult Attachment Interview (Steele & Steele, 2008), capture data on caregivers’ representations of their own experiences being parented and can yield important data on the caregiver’s history. Some interviews, like the Circle of Security Interview (Cooper, Hoffman, Powell, & Marvin, 2005), combine questions focusing on the caregivers’ past history of being parented with questions on their current reflections regarding their relationships with their infants and young children. The type of interview the clinician uses will depend on his or her training and interest. For generalists, familiarity with the interview types and the use of one of these interviews is recommended. Specialists will likely select various interviews based on the goals of the assessment or the mode of treatment.

**Conceptualizing a Clinical Case: History and Observational Data**

Mr. and Mrs. Jones and their daughter, Katie, age 26 months, were referred to a clinician by their childcare provider because of concerns that the classroom teacher and center provider have about Katie’s behavior. The center indicated to the parents that Katie may
not be able to stay at the center because of her temper tantrums and aggression, including biting other children. They are also concerned that they cannot predict what Katie will be like from day to day, because sometimes she is approachable and other days she is angry and inconsolable. Katie arrives with her mother for her first appointment, and she immediately begins to cry when her mother leaves her on a couch to sign in at the nearby reception desk. As her cries become louder, Ms. Jones walks back to couch, places a toy in Katie’s lap, and tells her to “behave.” Once in the room with the clinician, Katie ignores the toys and attempts to sit on her mother’s lap. Ms. Jones allows this for a few minutes, but then places Katie back on the seat next to her. Katie whimpers until she is allowed back on her mother’s lap, a cycle that continues for the entire appointment. Katie cannot be enticed by the clinician or her mother to play with any of the toys.

Katie and her mother return to the office to complete a parent–child interaction procedure. During the procedure, Katie attempts to stay very close to her mother, and her mother eventually allows Katie to sit on her lap while they play with toys. When it comes time for her mother to leave the room, Katie becomes highly upset, crying and clinging to her mother. Ms. Jones peels Katie off of her and quickly leaves the room. Katie continues to cry, and when Ms. Jones reenters the room, Katie initially moves toward her, stops halfway, and falls to the ground, crying and kicking her feet. When her mother approaches her, Katie screams louder and rolls away. Ms. Jones responds by saying that Katie can come to see her when she is ready and takes a seat on a chair. After several minutes of crying, Ms. Jones says, “That’s enough,” picks up the screaming Katie, and leaves the clinic.

Several days later, Katie and Mr. Jones arrive at the clinic for their play interaction. Mr. Jones has a job that takes him out of town for 2 weeks at a time, followed by 2 weeks home with the family. He had been home for 2 days before the clinic appointment. Katie explores the room while Mr. Jones checks in and then brings a toy to show him when he sits down. In the procedure, Katie and her father take turns showing each other toys and playing with them. Katie sits near her father and occasionally reaches to touch his shoulder or hand. When it comes time for Mr. Jones to leave the room, Katie stills and appears surprised. As he walks out of the room, Mr. Jones tells Katie that he has to use the bathroom and he will be right back. As the door closes, Katie runs crying to the door, then walks to the other side of the room and kicks the toy they had been using. Mr. Jones returns to the room and Katie stops crying, but looks at him with an angry expression and states, “You left me.” Mr. Jones responds by inviting her back to play with the toy. After some moments, Katie returns to her father’s side to play.

**Conceptualizing a Case: Interview Data**

Katie’s parents return to the clinic to complete interviews about Katie. On the Disturbances of Attachment Interview, both parents see Katie as overly clingy and report that she does not seek comfort and is difficult to comfort when she is hurt or scared. However, Mr. Jones qualifies his answers by stating that it depends on how long he has been home, because he sees her being less intense, clingy, and difficult to soothe the longer he is
home. In his Working Model of the Child Interview, he describes Katie as sensitive and sometimes difficult to manage, but adds that his schedule is difficult for the family. He also sees Katie as having a good sense of humor and being very smart. He believes that she has entered the terrible twos and that the day-care center is being too “hard on her.” In Ms. Jones’s interview, she repeatedly states that it is difficult being a single parent when her husband is out of town and calls Katie a “daddy’s girl” with a sarcastic tone when she notes that Katie behaves better when her father is home. Ms. Jones expected that her daughter would be her little buddy and that they would go shopping together and laugh, but that has not happened. She finds Katie too mean at times and intrusive. Katie’s need to sit on her lap is seen as Katie keeping Ms. Jones from what she “needs to do. She’s greedy.”

Using Assessment Information in Case Conceptualizations

After a clinician completes the assessment procedures, the information gathered about the dyads and the family unit can be integrated into the clinician’s conceptualization of the child. In doing so, the clinician may look to answer the following questions: Does the child have at least one attachment figure, and if so, who is that attachment figure? What does the data suggest about the pattern of attachment between the child and his or her caregivers? Is there evidence of disorganization or role reversal? How does the caregiver think about the child, and how well does the caregiver’s behavior with the child match how the caregiver thinks about the child? What can be inferred from the child’s behavior about how the child thinks about the caregiver? Do the child and caregiver cue each other in ways that clearly indicate what they want, expect, or feel, or do they miscue each other? Can they read each other’s cues accurately and respond accordingly? In answering those questions, the clinician has information not only about the child’s attachment, but also about the strengths and areas for development for the child and the family, as well as points of intervention for them.

Conclusion

Attachment theory arose from animal studies and has, in turn, spawned research highlighting the importance of assessing attachment in early childhood. Clinicians should be familiar with the science behind attachment and how findings have shaped strategies for assessment. The Circle of Security provides a useful framework for thinking about attachment-relevant behaviors and for clinical formulation. Familiarity with interactive assessment procedures and narrative interviews of caregivers will enrich clinical practice and provide data for treatment planning. When the data suggest a possible attachment disorder, the same tools are critical but can be augmented by the Disturbances of Attachment Interview. As clinicians move from generalists to specialists in assessment in early childhood, their capacity to make meaning of interactive behavior and narrative interviews as they relate to the degree of security of children of differing ages increases with training and experience. Recognizing signs of disorganized attachment or role reversal is particularly important in assessing high-risk cases. Furthermore, attachment-based inter-
ventions are growing in terms of their evidence base and use (Zeanah, Berlin, & Boris, 2011). Sroufe (2005) argued in the quote cited at the start of this chapter that “nothing can be assessed in infancy that is more important” (p. 365) than attachment. Fortunately, today’s clinician has many resources available for training in the assessment of attachment and a growing number of interventions that flow from comprehensive assessment.

References


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