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A REVIEW OF ATTACHMENT THEORY IN THE CONTEXT OF ADOLESCENT PARENTING

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Abstract

The purpose of this article is to review attachment theory and relate the attachment perspective to adolescent mothers and their children. Attachment theory explains positive maternal-infant attachment as a dyadic relationship between the infant and mother that provides the infant with a secure base from which to explore the world. With respect to cognitive, social, and behavioral domains, securely attached infants tend to have more favorable long-term outcomes, while insecurely attached infants are more likely to have adverse outcomes. Adolescent parenthood can disrupt normal adolescent development, and this disruption influences development of the emotional and cognitive capacities necessary for maternal behaviors that foster secure attachment. However, it appears that if specialized supports are in place to facilitate the process of developing attachment, infants of adolescent mothers can obtain higher rates of secure attachment than normative samples in this population.

This paper provides a review of attachment theory and relates the attachment perspective to the unique challenges of clinical work with adolescent mothers and their children. Infants of adolescent mothers are at risk for poor attachment outcomes that are associated with long-term adverse consequences in cognitive, adaptive, and behavioral domains (Belsky & Fearon, 2002; Karen, 1990). A secure attachment relationship evolves from a mother's ability to be reflective, responsive, and sensitive to her infant's needs and results in the infant's development of trust, confidence, and resilience in later life (Karen). Adolescent mothers may not intuitively be able to assume these characteristics that foster secure attachment because of their own developmental stage (Sadler & Cowlin, 2003). It is critical for clinicians to be able to recognize signs of poor attachment that can most easily be picked up by observations of the mother's interactions with her infant and to learn to model favorable parenting behaviors that enhance attachment. Secure attachment is a critical part of the foundation for a healthy life. Therefore, maternal-infant interactions, particularly in this high-risk adolescent population, need to be assessed in the context of pediatric clinical care.

Attachment theory has evolved from work by numerous researchers, primarily John Bowlby and Mary Ainsworth, and later Mary Main (Ainsworth, 1982; Ainsworth, 1985; Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969/1982; Bowlby, 1973; Bowlby, 1980; Main, Kaplan, & Cassidy, 1985). Attachment, according to Ainsworth (1963) is a "secure base

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from which to explore,” and this idea has since remained a fundamental principle of attachment theory. Bowlby (1969/1982) subsequently described attachment as a unique relationship between an infant and his caregiver that is the foundation for further healthy development. Bowlby described attachment theory as an inherent biological response and behavioral system in place to provide satisfaction of basic human needs. Mary Main, a student of Ainsworth’s, found that adult attachment representations, the construct of how adults remember their own childhood experiences, might influence the attachment categorization of their children (Main et al.).

Attachment security and the theory of the internal working model (IWM) are two hallmark ideas that comprise attachment theory and influence how the child views himself and other relationships (Belsky & Fearon, 2002; Cassidy, 2008). Whether mother-child interactions are positive or negative, some level of attachment security and subsequent IWM develops (Carlson & Sroufe, 1995). According to Bowlby (1969/1982), individuals develop “internal working models” of attachment that describe the relationship between the infant’s self and his attachment figure. In response to experiences and behavior of the attachment figure toward the infant, the infant is able to formulate mental responses to his attachment figure’s behavior that are catalogued as mental representations of the infant’s view of himself and understanding of his attachment figure (Bretherton, 1992). The infant’s ability to explore the world and relationships within it hinges on the type of attachment security that develops during the first year of life (Belsky & Cassidy, 1994). In the context of attachment theory, it is important to distinguish attachment behavior and attachment bond. Attachment behavior is behavior on the part of the infant that promotes proximity to the attachment figure, such as smiling and vocalization (Carlson & Sroufe; Cassidy). Attachment bond, however, is described by Ainsworth and Bowlby not as a dyadic and reciprocal relationship existing between the infant and his caregiver, but rather as the infant’s interpretation of his relationship to his mother (Cassidy). Evidence supports the positive influence of secure mother-child attachment on later development and aptitude (Slade & Aber, 1992). A secure attachment system serves as a foundation for expression of emotions and communication in future relationships, provides opportunities for self-regulation of affect (the ability to consider emotional processes before responding), and creates potential for resilience (Belsky & Cassidy; Carlson & Sroufe; Cassidy; Karen, 1990).

The many challenges and consequences associated with teen pregnancy and parenthood are well documented, but less is known about attachment relationships among adolescent mother-infant dyads (Manlove, Ikramullah, Mincieli, Holcombe, & Danish, 2009; Moore & Brooks-Gunn, 2002; Patterson, 1997). Many of the background and developmental characteristics of adolescent mothers also may be linked to poor attachment outcomes in their infants. Poverty, poor parental modeling, growing up in single-parent homes, and lack of educational opportunities and career goals are often associated with teen pregnancy and early parenthood (Coley & Chase-Lansdale, 1998; Manlove et al.; Moore & Brooks-Gunn; Patterson). Adolescent mothers are less likely to receive adequate prenatal care and are more likely to experience pregnancy and birth complications often because they are likely to be living in poverty (Coley & Chase-Lansdale). An analysis of the National Longitudinal Study of Adolescent Health from 1994 through 2008 revealed that adolescent parents are more likely to be from families that report incomes below 200% of the federal poverty level (FPL) (59% of survey respondents reported living in families with incomes below 200% of the FPL, and 41% reported living in families with incomes greater than or equal to 200% of the FPL) (The National Campaign to Prevent Teen and Unplanned Pregnancy, 2009). Adolescent mothers are more likely to suffer from depression and have a higher substance abuse potential (Clemmens, 2001; Panzarine, Slater, & Sharps, 1995; Reid & Meadows-Oliver, 2007; Spieker, Gillmore, Lewis, Morrison, & Lohr, 2001). In addition, they often have fewer resources, less social support and an increased potential for child abuse and

neglect (de Paul & Domenech, 2000; Panzarine et al.; Turner, Grindstaff, & Phillips, 1990; Whitman, Borkowski, Keogh, & Weed, 2001; Zuravin & DiBlasio, 1992). These factors, independently and collectively, heighten the risk of compromised parenting behaviors with these young families. Parenting behaviors among adolescent mothers vary, but many experience higher degrees of stress related to parenting, tend to be less responsive, less sensitive, more detached, and more likely to exhibit intrusive behaviors with their infants (Berlin, Brady-Smith, & Brooks-Gunn, 2002; Whitman et al.). These parenting characteristics specific to adolescent parents are precisely what place them at risk for compromised attachment relationships. We are only beginning to learn about the quality of attachment relationships among infants of adolescent mothers, but it appears they are often compromised, leading to less optimal infant outcomes in developmental and socioemotional domains, all of which are more likely to be the case when there are limited supportive programs or family members available to help the young mother in her new and complex parenting roles.

In addition to the socioeconomic profile of many adolescent mothers that may contribute to poor attachment outcomes, adolescent mothers differ developmentally from most adult mothers since they are working to combine their adolescent developmental tasks with the new tasks and roles of parenthood (Flanagan, McGrath, Meyer, & Garcia Coll, 1995; Moriarty Daley, Sadler & Reynolds, in press; Sadler & Cowlin, 2003). When a pregnancy occurs during adolescence, the period of development during which adolescents develop the cognitive skills to assume parenting responsibilities is interrupted (Whitman et al., 2001). As a result, many adolescent mothers may not have the developmental capacity to adopt parenting behaviors that enhance the maternal-infant attachment relationship. Adolescents tend to be idealistic, have a diminished capacity for reflection, and tend to embody egocentricity, individuality, and independence (Hamburg, 1998). Adolescent development allows for the transition to higher levels of cognitive function and ability to appreciate more abstract processes (Elkind, 1998). Maternal characteristics that enhance the attachment relationship, such as sensitive parenting, reflectivity, and responsiveness are challenging for adolescent mothers to intuitively adopt because they often do not have that cognitive awareness afforded by full adult development (Moriarty Daley, Sadler, & Reynolds; Sadler, Anderson, & Sabatelli, 2001).

Measurement of Attachment

The Strange Situation Procedure (SSP) has historically been the standard method for assessing attachment (Ainsworth et al., 1978). In a laboratory setting with a mother and her infant present, the attachment relationship is stressed and the attachment system is activated by various episodes of the mother and a stranger coming and going. The infant's response to the situation, particularly during the mother-child reunion, is reflective of the child's attachment pattern (Ainsworth et al.; Van IJzendoorn & Kroonenberg, 1988). The SSP is videotaped, and the attachment category is determined by standardized procedures for scoring (Ainsworth et al.). Mary Main later developed the Adult Attachment Interview (AAI) to assess adult attachment representations, which reveals how adults interpret their own childhood experiences (Hesse, 1999; Main et al., 1985; van IJzendoorn, 1995).

Attachment Classifications

Patterns of attachment and attachment classifications are associated with various outcomes. Ainsworth (1978) established a rating system based on the infant's behavior during the SSP, particularly during the reunion episodes with the mother. She described three categories of attachment: secure attachment (Group B), anxious-avoidant attachment (Group A), and anxious-resistant attachment (Group C) (Ainsworth et al., 1978). Subsequently, Mary Main

later classified an additional insecure group as Group D, which represents disorganized-disoriented attachment (Main & Solomon, 1990).

Securely attached infants account for 65–70% of infants, and they actively seek attention from their mothers, may become distressed upon the mother's departure or may decrease play and exploration, and are able to be consoled during the reunion episode of the SSP (Ainsworth et al., 1978). Anxious-avoidant infants represent about 20–25% of U.S. samples and can behave similarly to securely attached infants until the separation period of the SSP, when they do not appear to be affected by mother's departure. During the reunion episode, anxious-avoidant infants will not approach their mother and may protest her return by avoiding her (Ainsworth et al.; Slade & Aber, 1992). Anxious-resistant infants account for less than 10% of U.S. infants (Slade & Aber). They tend to lack comfort in exploration in a strange environment, are significantly distressed during the separation episode, and at the point of reunion are torn between a desire for proximity and resistance to comfort (Ainsworth et al.; Carlson & Sroufe, 1995; Slade & Aber). Disorganized-disoriented infants have no standard response to stress of separation and reunion and appear to have disorganized and unpredictable patterns of behavior (Main & Solomon, 1990).

There is literature to suggest cross-cultural application of these attachment patterns. Sagi-Schwartz and Van IJzendoorn (2008) reviewed cross-cultural attachment research and determined the three attachment patterns applied using the SSP are universal. Attachment classification, therefore, is dependent on the relationship of the infant and mother, and although there may be cultural factors that affect emotional responses and behaviors, it does not appear that attachment outcomes are directly associated with specific race or culture.

Patterns of Attachment and Subsequent Outcomes

Secure attachment can be protective and provide a foundation for exploration and normal development, while compromised attachment can lead to negative developmental outcomes in these domains (Greenberg, Speltz, & DeKlyen, 1993). Additionally, secure attachment relationships are associated with appropriate social development and the ability to interact with others throughout life, and individuals with insecure attachment are more likely to lack social aptitude (Belsky & Cassidy, 1994; Belsky & Fearon, 2002). Specifically, children with anxious-avoidant and anxious-resistant attachment styles have been reported to have behavior problems, emotional difficulties, and social incompetence (Belsky & Cassidy; Carlson & Sroufe, 1995). It is also understood that compromised attachment relationships are often correlated with developmental cognitive delays (Carlson & Sroufe). Behavioral problems, particularly aggression, have been associated with disorganized-disoriented attachment (Lyons-Ruth, Alpern, & Repacholi, 1993). The idea that attachment classifications correlate with later developmental course is central to attachment theory (Bowlby, 1969/1982). Researchers acknowledge the contribution of environmental factors, but consistent with Bowlby's notion of the important developmental considerations related to attachment, researchers continue to assess the impact of the quality of attachment (Belsky & Cassidy; Greenberg et al., 1993). Belsky & Fearon (2002) found correlations between different patterns of attachment and socioemotional and language development, but also stressed the influence of contextual risk factors that contribute to general cognitive development.

Risk and Protective Factors

There are a number of risk and protective factors that contribute to maternal-infant attachment relationships. Maternal responsiveness and sensitivity refers to the mother's ability to respond to her infant's cues and her ability to understand the infant's experiences and own mental state (Slade, 2005). The greater ability a mother has to be sensitive and

responsive to her infant, the greater likelihood the infant will develop a secure attachment (Bornstein & Tamis LeMonda, 1989; Bornstein & Tamis LeMonda, 1990; Bornstein & Tamis LeMonda, 1997; Dunham & Dunham, 1990; Goodman, Aber, Berlin, & Brooks-Gunn, 1998; Koren-Karie, Oppenheim, Dolev, Sher, & Etzion-Carasso, 2002; Landry, Smith, Miller Loncar, & Swank, 1998; Olson, Bates, & Kaskie, 1992; Raval et al., 2001; Seifer & Schiller, 1995; Van Egeren, Barratt, & Roach, 2001). Additionally, a mother's ability to assume the maternal role can affect the quality of attachment (Aber, Belsky, Slade, & Crnic, 1999; Benoit, Parker, & Zeanah., 1997).

Conversely, maternal depression and psychological distress can adversely affect the mother-infant attachment relationship (Murray, Kempton, Woolgar, & Hooper, 1993; Murray, Fiori Cowley, Hooper, & Cooper, 1996; Poehlmann & Fiese, 2001; Tronick & Weinberg, 1997). A mother's ability to recollect her own childhood and recall her experiences with her primary caregiver (maternal representation) also affects the maternal-infant attachment relationship. Poor maternal attachment representations, when a mother recalls unfavorable relationships in her past, may compromise the development of secure infant attachment (Fonagy, Steele, & Steele, 1991; Goldberg, Benoit, Blokland, & Madigan, 2003; Huth-Bocks, Levendosky, Bogat, & von Eye, 2004; Slade, 2005).

Some literature suggests that infant characteristics may play a role in the development of attachment relationships. Difficult temperaments have been shown both to affect the quality of attachment (Calkins & Fox, 1992) and to have no influence on attachment security (Belsky & Rovine, 1987; Mangelsdorf & Frosch, 2000). There is speculation that infant gender influences the quality of attachment (Greenberg, 1999). Furthermore, poor infant health is thought to compromise the quality of attachment. Literature on this topic specifically addresses the influence of preterm status and low-birth weight on maternal-infant attachment (Greenberg; Mangelsdorf, Plunkett, Dedrick, & Berlin, 1996; Wille, 1991). Preterm and low-birth weight is not inherently associated with poor attachment, but those infants may be more at risk for developmental delays and physical, cognitive, and visual impairments. As a result, attachment behaviors such as smiling, crying, and resistance to separations may look very different in these infants. However, the maternal response designed to promote security can still be observed. It is important to remember that attachment is a reciprocal relationship between the caregiver and the infant, and although an infant with compromised health status may not respond with the same attachment behavior patterns as a healthy infant, attachment relationships can still be assessed and enhanced.

Environmental factors, such as social support and the influence of multiple caregivers, may influence the quality of attachment. Social support is thought to be a protective factor in maternal-infant attachment relationships (Belsky, 1999; Berlin & Cassidy, 1999; Huth-Bocks et al., 2004; Simpson, 1999). Particularly relevant to adolescent mothers is maternal grandmother presence, which alters the maternal-infant attachment relationship and provides the child with the possibility of multiple attachment relationships (Cassidy, 2008; Howes, 1999; Patterson, 1997; Poehlmann & Fiese, 2001). Mothers have been most frequently studied in attachment research, primarily because they are most often the parent providing the secure base from which the reciprocal attachment relationship can develop. However, it is increasingly being recognized that the attachment relationship is not limited to mothers and infants, and an infant can develop a positive attachment with other consistent caregivers, including the infant's father, and often the maternal grandmother (Cassidy).

Although there is not a significant amount of research related to attachment patterns of infants of adolescent mothers, existing research reveals that adolescent mothers are at risk for poor attachment outcomes. Among this group, adolescent mothers living in poverty,

those with lower educational achievements, and those with poor social support have lower rates of secure attachment in their infants.

Clinical Application

Attachment theory provides a framework from which to understand and care for adolescent mothers and their infants. For the first time since 1991, the birth rate for adolescents living in the United States increased in 2006 and increased again in 2007 (Hamilton, Martin, & Ventura, 2009; Martin et al., 2009; Moore, 2008). As a result of this rise, more pediatric clinicians will be caring for adolescent parents and their children. Secure attachment relationships can lead to favorable outcomes both in the early years and as the child matures into adulthood, and it is an important foundation that should not be overlooked in the clinical setting. While attachment theory certainly has psychological applications, pediatric clinicians in the primary care setting are on the front lines and in a position to identify, assess, and enhance the attachment relationship. Ideally, pediatric clinicians can begin working with young mothers and their infants immediately after birth when the attachment relationship is first being established.

To begin, clinicians can simply explain the attachment relationship as a reflection of how the infant and mother respond to one another. Additionally, the clinician can explain the infant's attachment behaviors, such as smiling, crying, reaching, and resisting separations from the mother. Attachment behaviors ought to be met with a maternal response that will promote a feeling of security in the child. Clinicians can look for attachment behaviors in the visit, such as when the infant cries, follows, or how the child references the mother during greetings and reunions after short separations. During the visit, clinicians can model caregiver-infant relationships or coach and encourage young mothers to assume some of the behaviors that favor more secure attachment outcomes. Adolescent mothers may need help reinterpreting the infant's behaviors as cues to the parent about the infant's state and needs. For example, when an infant cries, a young mother may become frustrated with what can be a disrupting physical state and either ignore the infant or rush to pick the infant up for a feeding. Rather, the clinician can guide the mother to appreciate that the infant is crying to express an emotional state, ask the mother how she feels (with an "I wonder..." statement) when the infant cries, and how she thinks the baby might be feeling. It is with recognition of maternal and infant emotional and physical states that the dyadic attachment relationship has room to evolve in a healthy direction. Furthermore, as adolescent mothers sometimes have unreasonable developmental or behavioral expectations for their infants, it can also be helpful to coach or demonstrate the infant's developmental capacity at different ages and stages of development.

While there are increasingly more demands and time constraints around pediatric well child care visits, introducing attachment behaviors can easily be incorporated into the course of a routine examination. A well child care visit is a perfect opportunity to assess the attachment relationship and explain and model some of the behaviors on the part of the mother in response to the infant's behaviors that can improve this relationship. Separations and reunions between the infant and mother that take place over the course of a visit are a simple means by which the clinician can assess and coach adolescent mothers on ways to improve the attachment relationship. A securely attached infant will show some suspicion around the stranger (the clinician) and will continue to make contact with his mother, or check in with her to ensure his safety (Slade & Aber, 1992). When this occurs, for example when the clinician enters the room or begins the physical exam, the clinician can explain to the mother that the infant is looking around to make sure his mother is still present and explain that he feels safe with his mother in the room. When the child is removed from his mother's presence, perhaps simply by stepping out of the room with the infant, he may begin crying

and looking for his mother (Slade & Aber). A simple means to assess gross motor skills and understand the infant's attachment security simultaneously is to bring the infant out of the exam room and out of his mother's sight and let him crawl or walk back to his mother. It is important for the adolescent mother to understand that the crying infant is a strong indicator as to the security the child feels with respect to his mother. Finally, when the infant reunites with his mother, the infant often allows his mother to pick him up and comfort him before returning to play (Slade & Aber). This can be a very powerful message for a young teen mother who may not understand the extent of her role as a secure figure in her infant's life. In contrast to the secure infant, an insecurely attached infant may show little wariness around strangers, often show no protest when removed from their mother's sight, and offer little attention to their mother when reunited (Slade & Aber). It can be very striking to observe infant behavior, particularly as it relates to the mother's presence, and it can offer the clinician insight into the existing attachment relationship and provide teachable moments during the visit to enhance the relationship.

Observation of attachment behaviors is not limited to the primary care setting, and pediatric clinicians in acute care and urgent care settings can also use knowledge of attachment behaviors to aid in enhancing the attachment relationship. An acute care setting may in fact reveal even more about the nature of the attachment relationship, as it is in times of stress and separation that poor attachment behaviors are often revealed. Clinicians in an acute care setting can easily adapt the guidelines for encouraging attachment behaviors as described for a primary care setting as infant attachment behaviors, such as crying, smiling, and resisting separations and the maternal response to these behaviors can be observed in any environment. Especially in stressful environments such as hospital settings, the attachment system affords the clinician with a way of explaining the child's behavior to the parent and offers opportunities for coaching to enhance the attachment relationship.

Conclusion

Positive maternal-infant attachment can enhance a child's development and ability to explore the world from a secure emotional foundation. While there is little research specifically related to attachment outcomes of infants of adolescent mothers, at present we know that adolescent mothers and their infants generally have lower rates of secure attachment. These young dyads often lack the cognitive maturity and resources to appreciate the maternal and infant behaviors that are associated with more favorable attachment relationships. Young mothers often benefit from guidance in the process of assuming the maternal role in a way that will facilitate secure attachment, and this can be accomplished in the course of a well child visit. Secure attachment is associated with positive long-term cognitive, social, and behavioral outcomes, and it is worth bringing attachment theory into practice as a means to facilitate secure attachment in a population particularly at risk for poor attachment patterns.

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