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Attachment: Clinical perspectives

While secure parent-child attachment does not ensure good mental health, it does act as a protective factor.

ABSTRACT: Attachment is a frequently used term in the field of relationships. As we learn more about this subject, controversies continue to emerge and some common misconceptions remain. Health professionals can benefit from knowing more about the historical evolution of the concept of attachment. They can also benefit from a survey of terminology used in the vast literature related to the topic and a review of current research on different aspects of this familiar but complex subject.

Parents may approach physicians and other health professionals with questions and concerns related to "attachment." Despite an abundance of information on attachment, there is often confusion surrounding the term. What is the meaning of *attachment* and what do we really know about attachment and its relationship to mental health?

Family physicians, developmental-behavioral pediatricians, psychiatrists, and obstetricians can all benefit from familiarizing themselves with the findings from material published by respected authorities in the field of attachment.

Origins of attachment theory

Attachment is a lifelong process. John Bowlby, pioneer of attachment theory, emphasized this principle by describing it as occurring from "cradle to grave."[1] His systematic retrospective study of the many cases he had observed were published in 1994, more than a decade after his observations.[2] In 1950, Bowlby was asked by the World Health Organization to advise on the mental health of institutionalized children. His important discovery was that children who had been deprived of maternal care tended to develop the same symptoms as he had identified in 44 "affectionless" young thieves.

In Bowlby's report for WHO, he presented evidence and formulated a principle: "What is believed to be essential for mental health is that the infant and young child should experience a warm, intimate and continuous relationship with his mother (or permanent mother-substitute) in which both find satisfaction and enjoyment."[3] He saw the mother's emotional attitude toward the child as equally important. Thus, the twin concepts of maternal availability and attitude conducive to sustaining a healthy ongoing relationship provided the foundation for attachment theory. Bowlby's attention was on the enduring, continuous relationship with the child's mother, even past infancy. More recently, others have explored the importance of attachment in other contexts, including romantic relationships[4] and geriatric attachment relationships that resemble the early attachment relationship.

Ethnology and behavioral sciences have also influenced the origins of attachment theory. Lorenz's theory of imprinting,[5] Harlow's findings about how macaque monkeys in his experimental lab preferred a surrogate mother with soft touch,[6] and Robertson and Robertson's observations of the effects

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of separation from mother on infants and young children[7] have each had an indirect but strong influence.

Development of an assessment tool

Mary Ainsworth, a Canadian developmental psychologist, undoubtedly played the most important role in developing and refining the attachment concept presented by Bowlby. She had firsthand knowledge of how mothers and infants react to each other in day-to-day activities through her Ugandan study of Ganda babies.[8]

Ainsworth operationalized the concept of attachment. She created an assessment tool, the "strange situation," which allowed the empirical study of individual differences in attachment quality for infants 12 to 18 months of age. This tool has been used extensively in attachment research throughout the world. It focuses on how the mother-infant dyad functions under the stressful condition induced through this laboratory observational paradigm.[9] Depending on the quality of attachment and exploratory behavior exhibited during this procedure, the infant's attachment relationship with a particular caregiver is classified as "secure" (B), "avoidant" (A), or "resistant or ambivalent" (C). This way of classifying attachment relationships is sometimes referred to as a three-way classification system.

The secure type B pattern seen in the strange situation—distress at separation and reassurance by the reunion—is thought to reflect an internal working model (i.e., expectation) within the infant, characterized by confidence that the caregiver will be comforting and available. The insecure avoidant type A pattern is thought to indicate the infant's lack of confidence in the caregiver's availability, leading to a strategy of trying to control or down-regulate emotional arousal, to show little distress during separation, and to indicate definite disinterest at reunion. Insecure ambivalent or resistant type C infants, who show distress at separation but are not comforted by the caregiver's return, appear to have adopted the strategy of exaggerating or up-regulating affect in order to secure the caregiver's attention.

Refinement of a classification system

The three-way attachment classification system is now increasingly replaced by the four-way classification system with the addition of a new attachment category of "disorganized/disoriented" (D) attachment.[10] The disorganized/disoriented attachment category is for infants who seem to be missing an organized strategy to deal with the stress of separation from the maternal attachment figure in an unfamiliar circumstance. These infants were initially thought to be unclassifiable. An overrepresentation of infants with disorganized/disoriented attachment is seen in child protection clinics.

The disorganized/disoriented classification of strange situation behavior, which is marked by fear, freezing, and disorientation,[11] has been linked to maltreatment of the child[12] and unresolved trauma in the history of the parent.[13] Strange situation behaviors that characterize the type D form of attachment include displays of bizarre or contradictory behavior, such as walking away from the caregiver when distressed, hiding when the caregiver returns, and alternating between punitive behavior toward the caregiver and unsolicited caregiving. The child's attachment organization is thought to be destabilized by the "frightened and frightening" or incomprehensible behavior of the parent, as the attachment figure simultaneously represents danger and an expected source of safety. In general, the disorganized/disoriented infant seeks proximity to the caregiver in strange ways, suggesting no coherent strategy. For example, a child that one of this article's authors has observed was seen to approach the television with a hug when the parent—described by a therapist as "scary" and "rejecting"—entered the room. Main and Hesse[13] describe these infants as being unable to find a solution to the paradox of fearing the figures that they wish to approach for comfort in times of distress ("fear without solution"). Infant disorganization, this inability to maintain a coherent strategy with the caregiver, has been linked to later psychopathology, including dissociative symptoms in particular, in a number of longitudinal investigations.[14,15]

Clarification of definitions

An attachment relationship is enduring and biologically based. Important points include the following:

- Attachment is a reciprocal but unequal relationship.
- The infant seeks proximity to the maternal figure, who is supposed to be wiser and more capable, providing protection and "felt security."[16]
- The relationship is unequal in that the mother should not be expected to seek protection or comforting from her infant; unfortunately, the latter *is* seen in disturbed attachment scenarios.

The terms *attachment* and *bonding* are sometimes used interchangeably to indicate either the parent's emotional tie to the infant or the infant's to the parent. Their respective meanings are, however, different. An infant is *attached* to his or her parent, whereas parents are described as *bonded* to their infants.

Bowlby described four systems in mother-infant relationships: the

"attachment" system, the "exploratory" system, the "affiliative" system, and the "fear" system. An infant's crying, looking, smiling, fussing, walking, and reaching are all part of his or her tool kit. These systems have to be considered together to understand the whole scope of attachment experiences for the infant as well as the functions of the attachment figure. The exploratory system is linked closely with the attachment system. Why this is important is aptly reflected in the concepts of the "secure base" and "safe haven." Most infants are able to negotiate these two systems well. Using the caregiver as a secure base, they explore the environment. When feeling threatened, they turn to the caregiver, a safe haven, for comfort, protection, and reassurance. Thus, when the attachment system is activated, as with separation from the attachment figure, infant exploration declines.

The affiliative system is separate from and should not be confused with the attachment system. The human species is gregarious and young children may seek contact with others, such as playmates. However, as discussed elsewhere in this article, the young child seeks proximity to an attachment figure not primarily for pleasant interaction but for comfort, protection, and emotional reassurance.

The fear system and attachment system are intertwined. When an infant is fearful of a situation, he or she seeks protection from attachment figure by activating attachment-related behaviors, such as crying, walking toward the figure, or protesting. The central role of fear induced by separation distress is seen through every stage of the strange situation experiments.[17]

The attachment literature often uses terms such as "primary" and "secondary" attachment figures. Not every person in an infant's early life can become an attachment figure. Howes[18] suggests that the attachment figure needs to provide physical and emotional care, continuity, or consistency in the child's life, and have an emotional investment in the child. Usually, the infant's biological mother will assume this role. Fathers can certainly be competent caregivers, however, and in some families may be the primary attachment figure. Secondary attachment figures are important caregivers in the infant's life and, in addition to fathers, may be siblings, grandparents, aunts or uncles, or care providers. There is a wide cultural variation in the establishment of alternative attachment figures.

Attachment and psychological functioning

The attachment figure has important psychological functions besides providing a secure sense of proximity to her infant. Bowlby described the development of internal working models (IWM) within the infant. This internal model functions as a prototype of being with an attachment figure and of using beliefs and expectations from that prototype to gauge how to interact with others in close relationships. In some ways, these models provide the blueprint for further relational successes/failures.

Bowlby also envisioned a complementary working model of the self,[19] the key feature being how worthy of care (loveable) the child feels in the eye of the attachment figure. Many researchers have explored the function of these inherent psychological functions in terms of providing "felt security"[16] or mechanisms for affect regulation.[19] Recently, Fonagy has put forward the notion of the interpersonal interpretive mechanism (IIM) to explain the process of attachment. Fonagy and colleagues describe attachment as equipping an individual with the ability to interpret interpersonal experience.[20]

Attachment and psychobiology

Attachment relationships appear not only to shape affect regulation and interpersonal functioning, but also to influence aspects of the infant's physiology.[21] There is already an extensive body of research on the psychobiology of early social attachment in non-human primates.[22] In humans, caregiver interactions are important for the development of several neurochemical and neuroendocrine systems. Promising new attachment research relates to connection with the neurobiological systems involved with memory and the expansion of the child's coping capacities.[21]

The debate of environment versus genetic contribution to attachment styles is to a certain extent resolved. Instead of looking at contributions from genetics or environment, increasingly the concept of behavioral genetics is applied. Two important studies demonstrate that temperament—the individual's unique psychological and biological organization—is not a powerful determinant of attachment security.[23] However, irritability in early infancy does appear to increase the risk of insecurity by compounding the impact of inadequate caregiving and social disadvantage.[24]

Many longitudinal studies on the stability of attachment classification have been completed. The predictability of certain reunion behaviors at the age of 6 years based on observation at 1 year is impressive.[25] There are similar predictive observations on infant strange situation behaviors from year 1 to year 6.[26] Insecure attachment does not necessarily translate into an attachment disorder (which will be discussed in Part 2 of this theme issue), but the

disorganized/disoriented pattern has the strongest predictive significance for late psychological disturbance.[27]

Some misconceptions

There are a number of misconceptions regarding attachment:

Attachment does not occur in the face of maltreatment. Maltreatment does *not* inhibit formation of attachment bonds. Rather, it is the quality of the attachment relationship that is weakened. There is considerable evidence that maltreated infants have disorganized/disoriented attachment relationships. It is rare for a child to be nonattached.

Attachment relationships need to be perfect. Even in the most attuned mother-infant dyads, there is no guarantee that the relationship will be perfect. In fact, the repair of disruptions of interaction is an essential component of a "good enough" relationship.[28] Winnicott's reference to a "good enough" relationship reminds us that parents do not need extraordinary capacities for this to develop. It is important to remember that infants play active roles in dyadic attachment relationships. Infants and their caregivers come in different shapes and sizes, with some more geared toward an attuned relationship than others.

Not breastfeeding jeopardizes attachment. The quality of feeding, including enjoyment of physical contact, eye contact, attunement, and sensitivity to infant's cues, rather than the feeding method is what matters.

Parents must work vigilantly 24 hours a day, 7 days a week to promote optimal attachment experiences for their child. Clinicians have to be very sensitive to parents' wishes regarding what they consider to be an optimal attachment experience. First, Bowlby stated clearly that mothers have to provide exploration opportunities by being a secure base for their infants. Increasing physical proximity to 24 hours a day would thwart that opportunity. Second, the infant needs to learn to create a sense of self; developing the capacity to be alone in the presence of the attachment figure facilitates this process. Third, practical factors also have to be respected. Most mothers will burn out if they attempt this vigorous parenting. Lastly, if parents do resort to this style of parenting, there may be some underlying anxiety in parenting that needs to be explored.

The use of childcare by working mothers causes insecure attachment. There is still debate regarding out-of-home care for infants. Overall, it is the quality of care that matters the most. Children receiving insensitive and unresponsive care from both their mother and their childcare providers are at risk of insecure attachments.[29]

Mothers are more capable than fathers in promoting secure attachment. In our culture, mothers are still the primary caregivers. However, when given the opportunity, infants will show preference for fathers as predictably as for mothers. Moreover, fathers' relationships with their infants are largely influenced by culturally sanctioned roles, making accurate predictions regarding a father's capacity as a primary attachment figure somewhat difficult.[30]

Disorganized/disoriented attachment classification inevitably leads to mental illness. Although we consider disorganized/disoriented attachment to be a risk factor for psychopathology, 18% of the North American population has this attachment style. The child may have different styles of attachment relationships with different caregivers. Similarly, secure attachment does not lead to a clean bill of mental health, although it certainly acts as a protective factor. Attachment, although important, is one of many complex factors influencing mental health.

Primary attachment does not occur in cultures where infants are cared for by the extended family. In extended families with multiple caregivers, primary attachments still occur. There is a hierarchical organization of attachment relationships with a preferred principal attachment figure.

Separation of premature babies from their parents will weaken their chances of secure attachment. The separation of premature infants from parents does not interfere with secure attachment. Immediate parent-infant skin-to-skin contact after birth is not a prerequisite for attachment. Parents may require accurate information and reassurance about this to prevent unnecessary guilt and anxiety.

Conclusions

It is important for caregivers to understand that the attachment relationship is an essential part of our lives, and that at best it should be an unequal relationship. It is the responsibility of adult caregivers to offer optimal caregiving experiences to their infant. Nearly all caregivers want to form a comfortable relationship with their infants. Sensitive parenting that accepts the infant as having his or her own emotional life and takes into account infant cues, ensuring emotional warmth and a sense of security, provides a very good start that will lead to a comfortable dyadic relationship.

Competing interests

None declared.

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