

## **ATTACHMENT**

# The Impact of Attachment-Based Interventions on the Quality of Attachment Among Infants and Young Children

Mary Dozier, PhD, Kristin Bernard, MA University of Delaware, USA August 2009, Rev. ed.

## Introduction

A key biologically-based task for infants and toddlers is developing attachment relationships with caregivers. The quality of attachment that children develop appears largely dependent on caregivers' availability. When caregivers are responsive, children tend to develop secure attachments, seeking out caregivers directly when distressed. When caregivers reject children's bids for reassurance, children tend to develop avoidant attachments, turning away from caregivers when distressed. When caregivers are inconsistent in their availability, children tend to develop resistant attachments, showing a mixture of proximity-seeking and resistance. Although it may be optimal for children in our society to develop secure attachments, <sup>2-6</sup> each of these three attachment types can be seen as well-suited to caregivers' availability. When caregivers are frightening to children, though, children have difficulty developing organized attachments and instead often develop disorganized attachments, which leave children without a consistent strategy for dealing with their distress. Attachment quality has been linked with later problem behaviours, with disorganized attachment especially predictive of dissociative symptoms (e.g. seeming spacey, "in a fog" etc.), and internalizing and externalizing problems. A number of prevention and intervention programs have been developed that aim to improve infant attachment quality.

# Subject

The strongest predictor of infant attachment is parental state of mind with regard to attachment. State of mind refers to the manner in which adults process attachment-related thoughts, feelings and memories. When parents are coherent in discussing their own attachment experiences, they are said to have "autonomous states of mind" with regard to attachment. When parents are not coherent in discussing their own attachment

experiences, they are said to have "non-autonomous states of mind" with regard to attachment. Parents with autonomous states of mind are most likely to have babies with secure attachments, whereas parents with "non-autonomous" states of mind are most likely to have babies with insecure attachments. Given this association between parental state of mind and infant attachment, some interventions <sup>12-15</sup> target parent state of mind as a means of changing infant attachment.

Other interventions <sup>16-18</sup> attempt to change parental behaviours without targeting parental state of mind. In particular, a number of interventions have attempted to enhance caregiver sensitivity. Caregiver sensitivity has not been linked as strongly with attachment quality as has state of mind, <sup>11</sup> but sensitivity has seemed the most likely mechanism by which caregiving qualities are transmitted to children.

#### **Problems**

Programs that share the goal of enhancing attachment may differ in their focus, in their intervention strategy, and in the populations targeted. Whereas an overall objective may be to enhance attachment quality, other goals of improving quality of life, increasing life skills and reducing symptomatology may differ, depending on the intervention and the population served, as well as the level of fidelity to the treatment model. There is disagreement among experts in the area regarding the nature of what is needed. For example, some <sup>13</sup> suggest that intensive interventions that start prenatally are essential, whereas others <sup>19</sup> suggest that targeted, short-term interventions are needed. Assessment of treatment process and treatment fidelity is crucial to knowing what is being provided in an intervention. For example, Korfmacher et al. <sup>20</sup> found that their intervention, intended to modify parental state of mind, rarely engaged parents in insight-oriented work.

### **Research Context**

In 2003, a meta-analysis reported by Bakermans-Kranenburg, van IJzendoorn and Juffer <sup>19</sup> found 29 studies that included attachment security as an outcome. Of these, 23 were randomized clinical trials, with a total of 1,255 participants. The nature of the interventions, and the populations served, differed widely from one study to another. Nonetheless, meta-analytic results allow assessment of the importance of factors such as intervention intensity and population. Attachment quality was assessed in the Strange Situation in most studies, although the Attachment Q-set was used in some investigations.

## **Key Research Questions**

Key research questions include:

- Do intervention or prevention programs enhance the quality of children's attachments to their caregivers?
- What are the characteristics of successful interventions?
- For whom are interventions most successful?
- What is the process by which intervention programs work?

# **Recent Research Results**

Interventions that have targeted sensitivity have been found to be more effective in enhancing attachment

security than interventions targeting other issues (such as parental state of mind).<sup>19</sup> It makes sense to target parental behaviours directly, rather than underlying characteristics, for several reasons. First, state of mind and other parent characteristics are not as amenable to change as are parental behaviours. Second, presumably, it is parental behaviours that directly affect children's expectations of parental availability.

Interventions that started after the child was at least six months old have been more effective than those starting earlier. Although it is speculative, interventions may be most efficient and effective when children have begun to show attachments to specific caregivers.

For the most part, intervention effects have not proven to be significantly different for different types of study populations. For example, intervention effects have been generally comparable across risk status and socioeconomic status. Nonetheless, samples with higher levels of insecurity have shown the largest effect sizes.

#### Conclusions

- 1. Interventions are effective in enhancing children's attachment quality.
- 2. Interventions that target specific issues, most especially parental sensitivity, appear more effective than interventions with more global goals.
- 3. Interventions that are brief are at least as effective as those that are of longer duration.
- 4. Interventions that begin when attachment quality has begun to emerge (after about six months of age) appear more effective than those begun earlier.

## **Implications**

Currently, the research evidence favours brief, highly targeted interventions to enhance attachment quality among infants. Given that the current evidence base is relatively small, it makes sense to continue to examine associations between intervention characteristics and outcome. Nonetheless, at this point, time-limited interventions beginning in the second half of the first year of life appear most promising.

#### References

- 1. Ainsworth MD. The development of infant-mother attachment. In: Caldwell BM, Ricciutti HN, eds. *Child development and social policy*. Chicago, Ill: University of Chicago Press; 1973:1-94. *Review of child development research*; vol. 3.
- 2. Elicker J, Englund M, Sroufe LA. Predicting peer competence and peer relationships in childhood from early parent-child relationships. In: Parke RD, Ladd GW, eds. *Family-peer relationships: Modes of linkage.* Hillsdale, NJ: Lawrence Erlbaum Associates; 1992:77-106.
- 3. Erickson MF, Sroufe LA, Egeland B. The relationship between quality of attachment and behavior problems in preschool in a high-risk sample. *Monographs of the Society for Research in Child Development* 1985;50(1-2):147-166.
- 4. Matas L, Arend RA, Sroufe LA. Continuity of adaptation in the second year: The relationship between quality of attachment and later competence. *Child Development* 1978;49(3):547-556.
- 5. Sroufe LA. Infant-caregiver attachment and patterns of adaptation in preschool: The roots of maladaption and competence. Minnesota Symposia on Child Psychology 1983;16:41-83.
- 6. Kobak R, Cassidy J, Lyons-Ruth K, Ziv Y. Attachment, stress, and psychopathology: A developmental pathways model. In: Cicchetti D, Cohen DJ, eds. *Developmental psychopathology*. 2nd Ed.. New York, NY: Wiley-Interscience; 2006:333-369. *Theory and method*; vol 1.
- 7. Carlson EA. A prospective longitudinal study of attachment disorganization/ disorientation. Child Development 1998;69(4):1107-1128.

- 8. Lyons-Ruth K, Alpern L, Repacholi B. Disorganized infant attachment classification and maternal psychosocial problems as predictors of hostile-aggressive behavior in the preschool classroom. *Child Development* 1993;64(2):572-585.
- 9. Lyons-Ruth K. Attachment relationships among children with aggressive behavior problems: The role of disorganized early attachment patterns. *Journal of Consulting and Clinical Psychology* 1996;64(1):64-73.
- 10. Lyons-Ruth K. Contributions of the mother-infant relationship to dissociative, borderline, and conduct symptoms in young adulthood. *Infant Mental Health Journal*. 2008;29(special issue):203-218.
- 11. van Ijzendoorn MH. Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the adult attachment interview. *Psychological Bulletin* 1995;117(3):387-403.
- 12. Lieberman AF, Weston DR, Pawl JH. Preventive intervention and outcome with anxiously attached dyads. *Child Development* 1991;62(1):199-209.
- 13. Egeland B, Weinfield NS, Bosquet M, Cheng BK. Remembering, repeating, and working through: Lessons from attachment-based interventions. In: Osofsky JD, Fitzgerald HE, eds. *Infant mental heath groups at high risk*. New York, NY: Wiley; 2000:35-89. *Handbook of infant mental health*; vol. 4.
- 14. Heinicke CM, Fineman NR, Ruth G, Recchia SL, Guthrie D, Rodning C. Relationship-based intervention with at-risk mothers: Outcome in the first year of life. *Infant Mental Health Journal* 1999;20(4):349-374.
- 15. Baradon T, Steele M. Integrating the AAI in the clinical process of psychoanalytic parent-infant psychotherapy in a case of relational trauma. In: Steele H, Steele M, eds. Clinical applications of the Adult Attachment Interview. New York, NY: Guilford Press; 2008;195-212.
- 16. van den Boom DC. The influence of temperament and mothering on attachment and exploration: An experimental manipulation of sensitive responsiveness among lower-class mothers with irritable infants. *Child Development* 1994;65(5):1457-1477.
- 17. van den Boom DC. Do first-year intervention effects endure? Follow-up during toddlerhood of a sample of Dutch irritable infants. *Child Development* 1995;66(6):1798-1816.
- 18. Juffer F, Hoksbergen RAC, Riksen-Walraven JM, Kohnstamm GA. Early intervention in adoptive families: Supporting maternal sensitive responsiveness, infant-mother attachment, and infant competence. *Journal of Child Psychology and Psychiatry and Allied Disciplines* 1997;38(8):1039-1050.
- 19. Bakermans-Kranenburg MJ, van IJzendoorn MH, Juffer F. Less is more: Meta-analyses of sensitivity and attachment interventions in early childhood. *Psychological Bulletin* 2003;129(2):195-215.
- 20. Korfmacher J, Adam E, Ogawa J, Egeland B. Adult attachment: Implications for the therapeutic process in a home visitation intervention. Applied Developmental Science 1997;1(1):43-52.