



THE FSU
HARRIS INSTITUTE
for Infant Mental Health Training

FSU Center for Prevention
& Early Intervention Policy

Enhancing Maternal Sensitivity to Infants and Young Children

* Mothers' sensitivity to the behavior and emotions of their infants and toddlers has been shown to be important for the development of secure attachment. In turn, secure attachment predicts a less stressful transition to day care, and better social-emotional adjustment in later childhood, adolescence, and adulthood. There are also important direct effects of maternal sensitivity and warmth. For example, greater maternal warmth has been shown to moderate the effects of low birthweight (LBW) on attention problems in 5 year olds. This finding suggested that increasing maternal warmth among mothers of LBW infants may prevent later behavior problems. Conversely, more maternal negativity and less warmth are correlated with antisocial behavior at age 5 and are predictive of increases in antisocial behavior from ages 5 to 7.

REFERENCES

Pederson, D. R., Moran, G., & Bento, S. (1999). *Maternal behavior Q-sort manual version 3.1* (Rev.ed.) Retrieved March 2, 2006 from <http://www.ssc.uwo.ca/psychology/faculty/pedmor/mbqmanual.html>

Berlin, L. J. (2005). Intervention to enhance early attachments: The state of the field today. In L. J. Berlin, Y. Ziv, L. Amaya-Jackson, & M. T. Greenberg (Eds.), *Enhancing early attachments* (pp. 3-37). New York: Guilford.

De Wolff, M., & van Ijzendoorn, M. H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachments. *Child Development*, 68, 571-591.

Bakersman-Krannenberg, M. J., van Ijzendoorn, M. H., & Juffer, F. (2003). Less is more: Meta-analyses of sensitivity and attachment interventions in early childhood. *Psychological Bulletin*, 129, 195-215.

RESEARCH

Behaviors commonly used as indicators of maternal sensitivity with very young children include: responding accurately to child's distress when doing "something else", identifying sources of child distress, monitoring child's activity, following the child's focus and pace in interaction, having realistic expectations about child's emotional self-control, acknowledging child's positive signals, and spontaneously expressing positive feelings to the child.

In attempts to enhance maternal sensitivity, three different types of intervention strategies have been studied: 1) Enhancing maternal sensitivity at the behavioral level, 2) Promoting positive maternal representations of their children, and 3) Providing mothers' with social support. Programs that are designed to enhance maternal mental health may often combine these three more specific strategies with additional approaches.

In a recent meta-analysis of 70 studies, all three strategies were examined, and some studies used combinations of strategies. Interventions began as early as the prenatal period, and studies were included with children up to 54 months. Generally, mothers showed gains in sensitivity from pretest to posttest, and the overall increase was approximately one-third of a standard deviation. While promoting sensitivity at the behavioral was effective when used alone, neither providing support nor promoting maternal representations were effective in isolation. Combining strategies was also effective in promoting maternal sensitivity. However, there was no additional gain beyond the effect of the behavioral-focused intervention.

REFERENCES

Bakersman-Krannenberg, M. J., van Ijzendoorn, M. H., & Juffer, F. (2003). Less is more: Meta-analyses of sensitivity and attachment interventions in early childhood. *Psychological Bulletin, 129*, 195-215.

Bakersman-Krannenberg, M. J., van Ijzendoorn, M. H., & Juffer, F. (2003). Less is more: Meta-analyses of sensitivity and attachment interventions in early childhood. *Psychological Bulletin, 129*, 195-215.

RESEARCH

The meta-analysis also examined three features across the studies to understand how the interventions worked: intensity of intervention, maternal characteristics and children’s age.

Intensity. Interventions with fewer than 5 sessions were equally (moderately) effective as interventions with 5 to 16 sessions. However, interventions with more than 16 sessions were less effective than those with fewer sessions. This pattern of greater effectiveness with fewer sessions was found for all the studies combined, as well as a subset of 30 studies that reported on interventions with multi-risk and/or clinically referred families. Comparing all types of interventions at all levels of intensity, briefer interventions focused only on sensitivity have fared the best (gains of almost one half standard deviation).

Maternal characteristics. Overall, the intervention effects were similar for mothers at higher vs. lower risk. Interventions have produced moderate gains in mothers of both lower and higher SES, adolescent mothers and older-than-adolescent mothers, mothers with pre-term infants and non pre-term infants, and multi-risk mothers and non multi-risk mothers. Interventions with clinically-referred mothers were, however, *more* effective than with non clinically-referred mothers.

Child age. Overall, interventions have proven effective if begun prenatally, at less than 6 months of age, and at more than 6 months of age. However, interventions begun when the child is older than 6 months have been shown to be most effective.

Additionally, while the use of videotaped feedback was relatively rare, these studies showed greater effectiveness than studies which did not use this method. Of important practical note, while both professional and nonprofessional interventionists were effective, the nonprofessional interventionists showed significantly better effects. Across the findings, there was also no evidence that families with multiple problems needed more intensive interventions to enhance maternal sensitivity. Finally, and crucially, the most effective sensitivity interventions also showed positive impacts on attachment security.

In sum, research has shown the importance of maternal sensitivity to children’s development. There has also been considerable effort to evaluate strategies to promote maternal sensitivity in both low and high-risk families. Current evidence indicates that when the specific goal is enhancing maternal sensitivity, interventions should be of short duration (no more than 16 sessions), use a behavioral focus, and begin after the child is 6 months old. With appropriate training, paraprofessional staff can be very effective.

* Ahnert, L., Gunnar, M. R., Lamb, M. E., & Barthel, M. (2004). Transition to child care: Associations with infant-mother attachment, infant negative emotion, and cortisol elevations. *Child Development, 75*, 639-650.

Egeland, B., Weinfield, N. S., Bosquet, M., & Cheng, V. K. (2000). Remembering, repeating, and working through: Lessons from attachment-based interventions. In J. D. Osofsky and H. E. Fitzgerald (Eds.), *Handbook of infant mental health: Vol. 4. Infant mental health in groups at high risk* (pp. 35-85). New York: Wiley.

Carlson, E. A., Sampson, M. C., & Sroufe, L. A. (2003). Implications of attachment theory and research for developmental-behavioral pediatrics. *Journal of Developmental and Behavioral Pediatrics, 24*, 364-379.

Caspi, A., Moffit, T. E., Morgan, J., Rutter, M., Taylor, A., & Arseneault, L., et al. (2004). Maternal expressed emotion predicts children’s antisocial behavior problems: Using monozygotic-twin differences to identify environmental effects on behavioral development. *Developmental Psychology, 40*(2), 149-161.

Tully, L. A., Arseneault, L., Caspi, A., Moffit, T. E., & Morgan, J. (2004). Does maternal warmth moderate the effects of birth weight on twins’ attention-deficit/hyperactivity disorder (ADHD) symptoms and low IQ? *Journal of Consulting and Clinical Psychology, 72*(2), 218-226.