

FOLLOWING IN THE FOOTSTEPS OF A PIONEERING CANADIAN RESEARCHER IN EARLY CHILDHOOD DEVELOPMENT¹

by Ray DeV. Peters, Professor of Psychology at Queen's University
and CEECD Directing Committee Member

Mary Salter began her Ph.D. studies at the University of Toronto in 1935 under the supervision of William E. Blatz, who directed the Institute of Child Study. Blatz had developed a theory of personality development called *Security Theory*. Blatz's theory posited that in infancy and early childhood, the individual needs to develop a secure dependence on parents in order to gain the courage necessary to brave the insecurity implicit in exploring the unfamiliar world and learning to cope with it. According to Blatz, a child needs to feel confidence in the secure base provided by parents to learn the skills and develop the knowledge that will gradually enable him or her to depend confidently on self, and eventually to gain a secure emancipation from parents. For her Ph.D. thesis, Salter developed a selfreport scale to assess the security of young adults' relations with their parents.

After World War II, Salter married Leonard Ainsworth and moved to the University of London, where she worked with John Bowlby² on a research project on the effects of separation from mother in early childhood. In 1962, at Johns Hopkins University in Baltimore, Mary Salter

Ainsworth began a short-term longitudinal study on the development of infant-mother attachments. Home visits were made at three-week intervals from three to 54 weeks after the baby's birth, each visit lasting about four hours, yielding 72 hours of observation for each infant-mother pair. In this research, Ainsworth was struck by the congruence between her observations of infants using their mothers as a secure base from which to explore the world and her Ph.D. research employing Blatz's security theory with adults.

According to Ainsworth's attachment theory growing out of this research, sensitive responding by the parent to the infant's needs results in secure infant attachment, while lack of sensitive responding results in one of two types of insecure attachment: avoidant attachment or resistant/ambiva-



lent attachment (infant shows hostility toward the parent). Ainsworth's theory provides not only a framework for attachment patterns in infants, but also a framework for understanding love, loneliness and grief in adults. Attachment styles in adults are thought to stem from the working (or mental) models of oneself and others that were developed during infancy and childhood, a central tenet of Blatz's earlier security theory.

In 2002, Dixon³ asked 1,500 randomly selected members of the Society for Research in Child Development to identify studies published since 1950 that deserved the title "Most Revolutionary." The longitudinal study by Ainsworth and her colleagues entitled "Patterns of Attachment"⁴ was considered one of the 20 most revolutionary studies in child development. Interestingly, Bowlby's study on "Attachment and Loss,"² on which Ainsworth had worked while she was in London, also made the Top 20 list.

The continued influence of this pioneering research by a Canadian woman, Mary Salter Ainsworth, permeates the research summarized in the following three articles on attachment in infants and adults. ¶¶



Lasting Comfort	2
Attachment interventions: less is more	4
Child-Parent attachment not affected by child care	5
CEECD/News	6

1. Ainsworth MS. A sketch of a career. In: O'Connell AN, Russo NE, eds. *Models of achievement: Reflections of eminent women in psychology*. New York, NY: Columbia University Press; 1983:200-219.
2. Bowlby J. *Attachment and loss: Attachment*. Vol 1. New York, NY: Basic Books; 1969.
3. Dixon WT. 20 studies that revolutionized child psychology. *Society for Research in Child Development* 2002;45(2):1.
4. Ainsworth MS, Blehar MC, Waters E, Wall S. *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Lawrence Erlbaum Associates; 1978.

LASTING COMFORT

by Eve Krakow

When babies are in pain, scared or tired, they instinctively seek their parents' protection. How parents respond to these signals in infancy can have a strong impact on their child's social and emotional development later in life.

There is growing evidence linking the quality of early attachment relationships with later social and emotional outcomes. Children are considered to be securely attached if they tend to seek contact with a specific caregiver (e.g. their mother) in times of distress, illness and fatigue. *"Attachment to a protective caregiver helps infants to regulate their negative emotions in times of stress and distress and to explore the environment, even if it contains somewhat frightening stimuli,"* explains Marinus van IJzendoorn, from the Centre for Child and Family Studies at Leiden University in the Netherlands.

In the early years, attachment relationships are the predominant and most influential relationships in a child's life. They set the stage for emotional and cognitive interpretations of social and non-social experiences, for language development, and for acquiring meaning about oneself and others. Attachment relationships continue to influence thoughts, feelings, motives and close relationships throughout life.

While human beings are born with the innate bias to become attached to a protective caregiver, the types of bonds they form are not genetically determined but rooted in interactions with their social environment during the first few years of life. *"Differences in attachment are mainly caused by nurture rather than nature,"* van IJzendoorn states.

There are four types of attachment: secure, insecure-avoidant, insecure-resistant and insecure-disorganized. *"The quality of attachment that children develop appears largely dependent on caregivers' availability,"* says Mary Dozier, a researcher at the University of Delaware. When caregivers are

responsive, children tend to develop secure attachments, seeking out caregivers 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. When caregivers are frightening to children, children have difficulty developing secure attachments and instead often develop disorganized attachments, which leave them without a consistent strategy for dealing with stress.

IMPACT OF ATTACHMENT RELATIONSHIPS

An extensive body of research has established a clear link between secure patterns of attachment in infancy and later social adaptation. *"Secure attachment has been associated with better developmental outcomes in areas that include self-reliance, self-efficacy, empathy and social competence,"* notes Greg Moran, a researcher in the Department of Psychology at the University of Western Ontario. *"Infants with non-secure attachments have been shown to be more prone to later problems in adaptation that include conduct disorder, aggression, depression and anti-social behaviour."*

The impact can extend well beyond childhood. Karin Grossmann and Klaus E. Grossmann, from the University of Regensburg in Germany, reviewed two longitudinal studies to see whether the quality of the infants' attachment was predictive of young adults' capacity to envision affective bonds. They also looked at how the children's experience

with their parents affected their later representations, or inner working models, of close relationships.

In particular, they found that security in attachment and partnership representation at the age of 22 was significantly predicted from security of attachment in adolescence and childhood. As well, mothers' and fathers' sensitivity during joint play with their child in the first six years of life contributed significantly to the child's later representation of close relationships. Parental sensitivity during play was characterized by parental behaviours that support the toddler's need to explore and become competent, and that promote cooperation, foster independent problem-solving, and pose appropriate challenges.

Finally, parental rejection during childhood and parental separation had great negative impacts on adolescents' representation of attachment. Rejection by both the mother and father during childhood remained a powerful influence on young adults' insecure representation of close relationships.

TARGETING PARENTAL SENSITIVITY

Given the pivotal role of attachment in children's development, various types of intervention are used to help parents develop secure affective bonds with their children.

Studies have shown that sensitive or insensitive parenting plays a key role in the emergence of secure or insecure attachments. Parental sensitivity is the ability to perceive and interpret children's non-verbal and verbal expressions correctly and respond to these signals promptly and properly. Many interventions therefore focus on improving parent or caregiver sensitivity.



“Attachment relationships continue to influence thoughts, feelings, motives and close relationships throughout life.”

reducing and/or eliminating atypical caregiver behaviours. *“There is a need to train service providers in the use of proven attachment-based techniques and in recognizing atypical behaviours linked to disorganized attachment,”* concludes Benoit.

IT TAKES A VILLAGE...

We all know the age-old adage, “It takes a village to raise a child.” Moran notes that in today’s society, this translates into ensuring that families at risk are given the social and financial resources necessary to provide their children with a supportive social environment.

Grossmann and Grossmann say that because children’s experiences with their parents have such a far-reaching impact, parents may need help in four areas: understanding child development in general; understanding the specific signals of emotional well-being for the individual child, especially if it is a child with special needs; organizing sufficient time for sensitive interactions; and finding an adequate substitute caregiver for times when the parents cannot care for the young child themselves.

“If, during interactions with parents, the child experiences acceptance, sensitive responsiveness to distress and appropriate challenges during exploration and cooperation, a secure model of a relationship is carried forward to other relationships in childhood, adolescence and young adulthood,” Grossmann and Grossmann conclude. 🐾

Currently, the research evidence favours brief, highly targeted interventions to enhance attachment quality among infants. Interventions that target specific issues, especially parental sensitivity, appear to be more effective than interventions with more global goals. *“Interventions that are brief are at least as effective as those that are of longer duration,”* notes Dozier. *“Interventions that begin when attachment quality has begun to emerge (after about six months of age) appear more effective than those begun earlier.”*

However, Diane Benoit, a doctor and researcher at the Hospital for Sick Children in Toronto, says that an exclusive focus on improving caregiver sensitivity is often neither sufficient nor effective in preventing or reducing the most clinically relevant type of

insecure attachment, i.e. disorganized attachment. As mentioned above, disorganized attachment is believed to develop when the caregiver displays unusual and ultimately frightening behaviours in the presence of the child. *“These children are more vulnerable to stress, have problems with regulation and control of negative emotions, and display oppositional, hostile-aggressive behaviours and unusual or bizarre behaviour in the classroom,”* she explains.

Of the four patterns of infant-caregiver attachment, the disorganized classification has been identified as a powerful childhood risk for later socio-emotional maladjustment and psychopathology. Thus, an attachment-based intervention should focus not only on improving caregiver sensitivity, but also on

Ref.: The articles of the quoted authors are available in: Tremblay RE, Barr RG, Peters RDeV, eds. *Encyclopedia on Early Childhood Development - Attachment* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development. Available at: <http://www.excellence-earlychildhood.ca/theme.asp?id=30&lang=EN>.

Benoit D. Efficacy of attachment-based interventions. 2005:1-5; **Dozier M.** The impact of attachment-based interventions on the quality of attachment among infants and young children. 2004:1-5; **Grossmann K., Grossmann KE.** The impact of attachment to mother and father at an early age on children’s psychosocial development through young adulthood. 2005:1-6; **Moran G.** Attachment in early childhood: Comments on van IJzendoorn, and Grossmann and Grossmann. 2005:1-4; **van IJzendoorn M.** Attachment at an early age (0-5) and its impact on children’s development. 2005:1-6.

ATTACHMENT INTERVENTIONS: LESS IS MORE

by Eve Krakow

Is early prevention intervention truly effective in enhancing parental sensitivity and infant attachment security, and if so, what type of intervention is most successful?

To find out the answers to these questions, researchers from the Centre for Child and Family Studies at Leiden University in the Netherlands analyzed 70 published studies of attachment-based interventions. Their conclusion: brief interventions focusing on parental sensitivity and starting after the child has reached six months of age are the most effective.

"Brief interventions focusing on the parents' behaviour are indeed effective in enhancing the parents' sensitive interactions with their children and their children's attachment security," states Marinus van IJzendoorn, who carried out the study along with Marian Bakermans-Kranenburg and Femmie Juffer.

The quantitative meta-analysis included programs that sought to enhance parental sensitivity at the behavioural level, programs designed to alter parents' mental representations, programs that provided and enhanced social support, and programs designed to enhance maternal health and well-being.

One surprising finding, says van IJzendoorn, was that helping parents become more sensitive to their children does not have to be a cumbersome process that takes years, but can be accomplished in five to 16 sessions of a few hours each. *"But the intervention needs to be intensive and focused, creating a mirror for the parent of what he/she is doing well and what is going wrong,"* he notes. *"Videotaped observations of this parent with this child have been proven to be extremely helpful in providing parents with the feedback they need to develop their strengths as parents."*



He adds that families seem most open to intervention in the second half of the first year of life, when problems become visible, and deviant parenting routines have not yet become engraved in stone.

The study also found that even in families with multiple problems, shorter and behaviourally focused interventions were more effective than longer, broad-band interventions. However, the researchers note that broad-band interventions may have positive effects on other outcomes not measured in this analysis.

Early childhood development specialists at the National Public Health Institute of Quebec drew on these findings to develop a guide to promote secure attachment, as

part of the home visiting program offered by the province's social service centres. *"This study helped us see the active ingredients of an intervention, showing us what methods are most effective,"* says Johanne Laverdure, Scientific Coordinator at the Institute.

"It confirms that when an intervention is structured, intensive and focused on behavioural strategies, it works well," adds Julie Poissant, research officer, who also worked on the guide.

While the home visiting program, like many others, has several aims, such as supporting mothers with mental-health problems or helping mothers go back to school, developing parental sensitivity is now a strong emphasis for the child's first year. 🐾

CHILD-PARENT ATTACHMENT NOT AFFECTED BY CHILD CARE

by Eve Krakow

Parents can relax: in most cases, sending their children into child care at an early age will not affect the attachment relationship between mother and child.

This was the main finding of a study by the National Institute of Child Health and Human Development (NICHD), Early Child Care Research Network, in which researchers looked at whether placing children in the care of someone other than their mothers during the early years had an effect on the attachment relationship when children reached three years of age. This study included 1,364 families from a wide range of socio-economic and socio-cultural backgrounds.

Researchers found that neither the number of hours in care, the quality of care, nor the type of care predicted in and of themselves attachment security at 36 months. The one exception was children whose interactions with their mothers were already compromised. *"If the child had a mother who was low in sensitivity, and the child was in more hours of care, the probability of being classified as securely attached was lower,"* says Sarah Friedman, one of the participating investigators.

Overall, says Friedman, this offers a reassuring message to parents. *"There was a worry before the study was conducted that children who were in child care, especially for many hours, might be less securely attached to their mother,"* she explains, noting that attachment security is important because it can affect a child's social, emotional and cognitive development. *"Our findings show that in general, this worry is not well-founded."*

Virginia O'Connell, Director of Nova Scotia's Early Childhood Development Services, says the study emphasizes the primary role of the parent in a child's development,



and therefore confirms the importance of parent education. *"Sometimes parents don't understand that their behaviour, role modelling and coping skills are all very much a part of their child's development."*

She says the study also indicates that early childhood educators working in child care facilities should be on the lookout for behaviours indicating insecure attachment and less sensitive parenting. If, for example, a child who has shown positive behaviours during the day suddenly becomes avoidant and controlling at pick-up time, the educator may want to gently approach the parent to offer support.

While O'Connell agrees that most children do well in child care, she cautions that the quality of child care — generally measured by the staff's level of training — is still very important. *"If you take a case where the quality of the program is very low or the staff*

are poorly trained, and mix it with a child and a parent in need, I would be concerned," she says, noting that the study does state its limitations in that teen mothers and facilities of lower-quality care were less likely to have participated. Friedman says that other analyses from the same study confirm the link between child care quality and the quality of mother-child interaction, peer relations, other aspects of social development, cognitive development and achievement.

Friedman adds that because every child is different, ultimately, decisions should be based on the individual child. *"Parents need to know that in general, the effects of child care are small, and the effects of families are greater. But each parent needs to look at his or her own child. If they feel their child is not adjusting well, they should talk to their child care provider."* ❦

Ref: NICHD Early Child Care Research Network. Child-care and family predictors of preschool attachment and stability from infancy. *Developmental Psychology* 2001;37(6):847-862.

NEW ON THE
CEECD WEBSITE!

EARLY CHILDHOOD A TO Z



The new thematic index of all documents available on our Web site puts everything at your fingertips. Just click to find expert papers from the Encyclopedia, Bulletin articles, Speaker's presentations from colloquia and CD-ROMS on topics related to early childhood development.

To learn more about Attachment, see our experts' papers in the online CEECD Encyclopedia, available free of charge:

www.excellence-earlychildhood.ca/encyclopedia.

The Bulletin is a publication of the Centre of Excellence for Early Childhood Development, one of four Centres of Excellence for Children's Well-Being funded by the Public Health Agency of Canada. The views expressed herein do not represent the official policies of the Public Health Agency of Canada. The Centre identifies and summarizes the best scientific work on social and emotional development of young children and makes this information available to service planners, service providers and policy-makers.

The Centre's partners are the Public Health Agency of Canada, Fondation Lucie et André Chagnon, Université de Montréal, Centre de recherche de l'Hôpital Sainte-Justine, Fondation Jules et Paul-Émile Léger, Canadian Paediatric Society, Montreal Children's Hospital, Canadian Child Care Federation, University of British Columbia, Institut national de santé publique du Québec, Dalhousie University, IWK Health Centre, Centre de Psycho-Éducation du Québec, Queen's University, First Nations of Quebec and Labrador Health and Social Services Commission, Invest in Kids.

We are grateful to the Fondation Jules et Paul-Émile Léger for their financial contribution to produce this bulletin.

Editors: Emmanuelle Vèrès and Richard E. Tremblay
 Contributor: Eve Krakow
 Proofreaders: Lucie Beaupré and Kathe Lieber
 Scientific Proofreaders: Sarah Friedman, Greg Moran and Marinus van IJzendoorn
 Layout: Guylaine Couture
 Printing: QuadriScan

Centre of Excellence for Early Childhood Development
 GRIP-Université de Montréal
 P.O. Box 6128, Succursale Centre-ville
 Montreal (Quebec) H3C 3J7
 Telephone: (514) 343-6111, extension 2541
 Fax: (514) 343-6962
 E-mail: cedje-ceecd@umontreal.ca
 Web site: www.excellence-earlychildhood.ca
 ISSN 1499-6219
 ISSN 1499-6227