bonding and attachment

Dr Bruce Perry, a senior fellow of the ChildTrauma Academy, is the guest speaker at the Adoption UK annual conference on 15 November when he will be talking about the effects of trauma and neglect on childhood development. Here, in the first of two articles, he introduces members to the importance of bonding and attachment.

The most important property of humankind is the capacity to form and maintain relationships. These relationships are absolutely necessary for any of us to survive, learn, work, love and procreate. Human relationships take many forms but the most intense, most pleasurable and most painful are those relationships with family, friends and loved ones.

Within this inner circle of intimate relationships, we are bonded to each other with ‘emotional glue’ - bonded with love. Each individual’s ability to form and maintain relationships using this ‘emotional glue’ is different. Some people seem ‘naturally’ capable of loving. They form numerous intimate and caring relationships and, in doing so, get pleasure. Others are not so lucky. They feel no ‘pull’ to form intimate relationships, find little pleasure in being with or close to others.

They have few, if any, friends and more distant, less emotional glue with family. In extreme cases, an individual may have no intact emotional bond to any other person. They are self-absorbed, aloof or may even present with classic neuropsychiatric signs of being schizoid or autistic.

The capacity and desire to form emotional relationships is related to the organization and functioning of specific parts of the human brain. Just as the brain allows us to see, smell, taste, think, talk and move, it is the organ that allows us to love – or not. The systems in the human brain that allow us to form and maintain emotional relationships develop during infancy and the first years of life. Experiences during this early vulnerable period of life are critical to shaping the capacity to form intimate and emotionally healthy relationships.

Empathy, caring, sharing, inhibition of aggression, capacity to love and a host of other characteristics of a healthy, happy and productive person are related to the core attachment capabilities which are formed in infancy and early childhood.

Are bonding and attachment genetic?
The biological capacity to bond and form attachments is most certainly genetically determined. The drive to survive is basic in all species. Infants are defenceless and must depend upon a caregiving adult for survival. It is in the context of this primary dependence, and the maternal response to this dependence, that a relationship develops. This attachment is crucial for survival.

An emotionally and physically healthy mother will be drawn to her infant - she will feel a physical longing to smell, cuddle, rock, coo and gaze at her infant. In turn, the infant will respond with snuggling, babbling, smiling, sucking and clinging. In most cases, the mother’s behaviours bring pleasure, soothing and nourishment to the infant and the infant’s behaviours bring pleasure and satisfaction to the mother. This reciprocal positive feedback loop, this maternal-infant dance, is where attachment develops.

Therefore, despite the genetic potential for bonding and attachment, it is the nature, quantity, pattern and intensity of early life experiences that express that genetic potential.

What is bonding?
Simply stated, bonding is the process of forming an attachment. Just as bonding is the term used when gluing one object to another, bonding is using our emotional glue to become connected to another. Bonding, therefore, involves a set of behaviours that will help lead to an emotional connection (attachment).

What is attachment?
Well, it depends. The word attachment is frequently used by mental health, child development and child protection workers but it has slightly different meanings in these different contexts. The first thing to know is that we humans create many kinds of ‘bonds’. A bond is a connection between one person and another. In the field of infant development, attachment refers to a special bond characterized by the unique qualities of the special bond that forms in maternal-infant or primary caregiver-infant relationships. The attachment bond has several key elements: (1) an attachment bond is an enduring emotional relationship with a specific person; (2) the relationship brings safety, comfort, soothing and pleasure; (3) loss or threat of loss of the person evokes intense distress.

This special form of relationship is best characterized by the maternal-child relationship. As we study the nature of these special relationships, we are finding out about how important they can be for the future development of the child. Indeed, many researchers and clinicians feel that the maternal-child attachment provides the working framework for all subsequent relationships that the child will develop. A solid and healthy attachment with a primary caregiver appears to be associated with a high probability of healthy relationships with others while poor attachment with the mother or primary caregiver appears to be associated with a host of emotional and behavioural problems later in life.

In the mental health field, attachment is used loosely has come to reflect the global capacity to form relationships. For the purposes of this paper, attachment capabilities refer to the capacity to form and maintain an emotional relationship while attachment refers to the nature and quality of the actual relationship. A child, for example, may have an ‘insecure’ attachment or ‘secure’ attachment.

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Frequently asked questions
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Therefore, despite the genetic potential for bonding and attachment, it is the nature, quantity, pattern and intensity of early life experiences that express that genetic potential.
Without predictable, responsive, nurturing and sensory-enriched caregiving, the infant’s potential for normal bonding and attachments will be unrealised. The brain systems responsible for healthy emotional relationships will not develop in an optimal way without the right kinds of experiences at the right times in life.

What are bonding experiences?
The acts of holding, rocking, singing, feeding, gazing, kissing and other nurturing behaviours involved in caring for infants and young children are bonding experiences. Factors crucial to bonding include time together (in childhood, quantity does matter!), face-to-face interactions, eye contact, physical proximity, touch and other primary sensory experiences such as smell, sound, and taste. Scientists believe the most important factor in creating attachment is positive physical contact (e.g., hugging, holding and rocking). It should be no surprise that holding, gazing, smiling, kissing, singing and laughing all cause specific neurochemical activities in the brain. These neurochemical activities lead to normal organization of brain systems that are responsible for attachment. The most important relationship in a child’s life is the attachment to his or her primary caregiver, optimally, the mother. This is because this first relationship determines the biological and emotional ‘template’ for all future relationships. Healthy attachment to the mother built by repetitive bonding experiences during infancy provides the solid foundation for future healthy relationships. In contrast, problems with bonding and attachment can lead to a fragile biological and emotional foundation for future relationships.

When are these windows of opportunity?
Timing is everything. Bonding experiences lead to healthy attachments and healthy attachment capabilities when they are provided in the earliest years of life. During the first three years of life, the human brain develops to 90 per cent of adult size and puts in place the majority of systems and structures that will be responsible for all future emotional, behavioural, social and physiological functioning during the rest of life. There are critical periods during which bonding experiences must be present for the brain systems responsible for attachment to develop normally. These critical periods appear to be in the first year of life and are related to the capacity of the infant and caregiver to develop a positive interactive relationship.

The impact of impaired bonding in early childhood varies. With severe emotional neglect in early childhood, the impact can be devastating. Children without touch, stimulation and nurturing can literally lose the capacity to form any meaningful relationships for the rest of their lives. Fortunately, most children do not suffer this degree of severe neglect. There are, however, many millions of children who have some degree of impaired bonding and attachment during early childhood. The problems that result from this can range from mild interpersonal discomfort to profound social and emotional problems. In general, the severity of problems is related to how early in life, how prolonged and how severe the emotional neglect has been.

This does not mean that children with these experiences have no hope to develop normal relationships. Very little is known about the ability of replacement experiences later in life to ‘replace’ or repair the undeveloped or poorly organized bonding and attachment capabilities.

Clinical experiences and a number of studies suggest that improvement can take place, but it is a long, difficult and frustrating process for families and children. It may take many years of hard work to help repair the damage from only a few months of neglect in infancy.

What other factors influence bonding and attachment?
Any factors that interfere with bonding experiences can interfere with the development of attachment capabilities. When the interactive, reciprocal ‘dance’ between the caregiver and infant is disrupted or difficult, bonding experiences are difficult to maintain. Disruptions can occur because of primary problems with the infant, the caregiver, the environment or the ‘fit’ between the infant and caregiver.

Infant: The child’s ‘personality’ or temperament influences bonding. If an infant is difficult to soothe, is irritable or unresponsive compared to a calm, self-soothing child, he or she will have more difficulty developing a secure attachment. The infant’s ability to participate in the maternal-infant interaction may be compromised due to a medical condition such as prematurity, birth defect or illness.

Caregiver: The caregiver’s behaviours can impair bonding. Critical, rejecting and interfering parents tend to have children that avoid emotional intimacy. Abusive parents tend to have children that become uncomfortable with intimacy and withdraw. The child’s mother may be unresponsive to the child due to maternal depression, substance abuse, overwhelming personal problems, or other factors that interfere with her ability to be consistent and nurturing for the child.

Environment: A major impediment to healthy attachment is fear. If an infant is distressed due to pain, pervasive threat or a chaotic environment, they will have a difficult time participating in even a supportive caregiving relationship. Infants or children in domestic violence, refugee, community violence or war zone environments are vulnerable to developing attachment problems.

Fit: The ‘fit’ between the temperament and capabilities of the infant and the mother is crucial. Some caregivers can be just fine with a calm infant but are overwhelmed by an irritable infant. The process of paying attention to, reading each other’s non-verbal cues and responding appropriately, is essential to maintain the bonding experiences that build in healthy attachments. The mutual frustration of being ‘out of sync’ can impair bonding.

(M)By Dr Bruce D Perry, MD, PhD adapted in part from: Maltreated Children: Experience, Brain Development and the Next Generation (WW Norton & Company, New York).

Watch out for the second part in the August issue of adoption today when Dr Perry looks at how abuse and neglect influences attachment and he looks at ways in which adopters can help maltreated children.

Please turn to back cover for more details of the Adoption UK annual conference.