

# Bonding and Attachment in Maltreated Children: Consequences of Emotional Neglect in Childhood\*

Dr. Bruce Perry

By [Bruce D. Perry, M.D., Ph.D.](#)

## Introduction

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.

## Frequently Asked Questions

### What is attachment?

Well, it depends. The word "attachment" is used frequently 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 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, 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 behavioral problems later in life.

In the mental health field, attachment has come to reflect the global capacity to form relationships. For the purposes of this paper, *attachment capabilities* refers 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.

### 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 behaviors

that will help lead to an emotional connection (attachment).

## 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 defenseless 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 behaviors bring pleasure and nourishment to the infant, and the infant's behaviors 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. Without predictable, responsive, nurturing, and sensory-enriched caregiving, the infant's potential for normal bonding and attachments will be unrealized. 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 behaviors 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 due to the fact that 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 percent of adult size and puts in place the majority of systems and structures that will be responsible for all future emotional, behavioral, 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.

## What happens if this window of opportunity is missed?

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.

## Are there ways to classify attachment?

Like traits such as height or weight, individual attachment capabilities are continuous. In an attempt to study this range of attachments, however, researchers have clustered the continuum into four categories of attachment: secure, insecure-resistant, insecure-avoidant, and insecure-disorganized/disoriented. Securely attached children feel a consistent, responsive, and supportive relation to their mothers even during times of significant stress. Insecurely attached children feel inconsistent, punishing, unresponsive emotions from their caregivers, and feel threatened during times of stress.

Dr. Mary Ainsworth developed a simple process to examine the nature of a child's attachment. This is called the Strange Situation procedure. Simply stated, the mother and infant are observed in a sequence of "situations": parent-child alone in a playroom; stranger entering room; parent leaving while the stranger stays and tries to comfort the baby; parent returns and comforts infant; stranger leaves; mother leaves infant all alone; stranger enters to comfort infant; parent returns and tries to comfort and engage the infant. The behaviors during each of these situations is observed and "rated." The behaviors of children in this testing paradigm is observed and categorized based upon both the child's willingness to re-engage with the parent, and the child's emotional state during the reunion.

Classification of Attachment	Percentage at One Year	Response in Strange Situation
Securely attached	60-70 %	Explores with M in room; upset with separation; warm greeting upon return; seeks physical touch and comfort upon reunion
Insecure: avoidant	15-20 %	Ignores M when present; little distress on separation; actively turns away from M upon reunion
Insecure: resistant	10-15 %	Little exploration with M in room, stays close to M; very distressed upon separation; ambivalent or angry and resists physical contact upon reunion with M
Insecure: disorganized/ disoriented	5-10 %	Confusion about approaching or avoiding M; most distressed by separation; upon reunion acts confused and dazed — similar to approach-avoidance confusion in animal models

## 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 comfort, irritable, or unresponsive compared to a calm, self-comforting 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 behaviors can also impair bonding. Critical, rejecting, and interfering parents tend to have children that avoid emotional intimacy. Abusive parents tend to have children who 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 situations, community violence, or war zone environments are vulnerable to developing

attachment problems.

**Fit:** The "fit" between the temperament and capabilities of the infant and those of the mother is crucial. Some caregivers can be just fine with a calm infant, but are overwhelmed by an irritable infant. The process of reading each other's non-verbal cues and responding appropriately is essential to maintain the bonding experiences that build in healthy attachments. Sometimes a style of communication and response familiar to a mother from one of her other children may not fit her new infant. The mutual frustration of being "out of sync" can impair bonding.

## How does abuse and neglect influence attachment?

There are three primary themes that have been observed in abusive and neglectful families. The most common effect is that maltreated children are, essentially, rejected. Children who are rejected by their parents will have a host of problems including difficulty developing emotional intimacy; some of these are listed below. In abusive families, it is common for this rejection and abuse to be transgenerational. The neglectful parent was neglected as a child; they in turn pass on the way they were parented. Another theme is "parentification" of the child. This takes many forms. One common form is when an immature young woman becomes a single parent. The infant is treated like a playmate and very early in life like a friend. It is common to hear these young mothers talk about their four-year-old as "my best friend" or "my little man." In other cases, the adults are so immature and uninformed about children that they treat their children like adults — or even like another parent. As a result, their children may participate in fewer activities with other children who are "immature." This false sense of maturity in children often interferes with the development of same-aged friendships. The third common theme is the transgenerational nature of attachment problems — they pass from generation to generation.

It is important to note that previously secure attachments can change suddenly following abuse and neglect. The child's perception of a consistent and nurturing world may no longer "fit" with their reality. For example, a child's positive views of adults may change following physical abuse by a baby-sitter.

## Are attachment problems always from abuse?

No, in fact the majority of attachment problems are likely due to parental ignorance about development rather than abuse. Many parents have not been educated about the critical nature of the experiences of the first three years of life. With more public education and policy support for these areas, this will improve. Currently, this ignorance is so widespread that it is estimated that one in three people has an avoidant, ambivalent, or resistant attachment with their caregiver. Despite this insecure attachment, these individuals can form and maintain relationships — yet not with the ease that others can.

## What specific problems can I expect to see in maltreated children with attachment problems?

The specific problems that you may see will vary depending upon the nature, intensity, duration, and timing of the neglect and abuse. Some children will have profound and obvious problems, while some will have very subtle problems that you may not realize are related to early life neglect. Sometimes these children do not appear to have been affected by their experiences. However, it is important to remember why you are working with the children and that they have been exposed to terrible things. There are some clues that experienced clinicians consider when working with such children; these are listed below.

**Developmental delays:** Children experiencing emotional neglect in early childhood often have developmental delay in other domains. The bond between the young child and her caregivers provides the major vehicle for developing physically, emotionally, and cognitively. It is in this primary context that children learn language, social behaviors, and a host of other key behaviors required for healthy development. Lack of consistent and enriched experiences in early childhood can result in delays in motor, language, social, and cognitive development.

**Eating:** Odd eating behaviors are common, especially in children with severe neglect and attachment problems. They will hoard food, hide food in their rooms, or eat as if there will be no more meals even if they have had years of consistent available foods. They may have failure to thrive, rumination (throwing up food), swallowing problems and, later in life, odd eating behaviors that are often misdiagnosed as anorexia nervosa.

**Soothing behavior:** These children will use very primitive, immature and bizarre soothing behaviors. They may bite themselves, head bang, rock, chant, scratch, or cut themselves. These symptoms will increase during times of distress or threat.

**Emotional functioning:** A range of emotional problems is common in maltreated children, including depressive and anxiety symptoms. One common behavior is "indiscriminant" attachment. All children seek safety. Keeping in mind that attachment is

important for survival, children may seek attachments — any attachments — for their safety. Non-clinicians may notice abused and neglected children are "loving" and hug virtual strangers. Children do not develop a deep emotional bond with relatively unknown people; rather, these "affectionate" behaviors are actually safety-seeking behaviors. Clinicians are concerned because these behaviors contribute to the abused child's confusion about intimacy, and are not consistent with normal social interactions.

**Inappropriate modeling:** Children model adult behavior — even if it is abusive. Maltreated children learn that abusive behavior is the "right" way to interact with others. As you can see, this potentially causes problems in their social interactions with adults and other children. For children who have been sexually abused, they may become more at-risk for future victimization. Boys who have been sexually abused may become sexual offenders.

**Aggression:** One of the major problems with these children is aggression and cruelty. This is related to two primary problems in neglected children: (1) lack of empathy and (2) poor impulse control. The ability to emotionally "understand" the impact of your behavior on others is impaired in these children. They really do not understand or feel what it is like for others when they do or say something hurtful. Indeed, these children often feel compelled to lash out and hurt others — most typically something less powerful than they are. They will hurt animals, smaller children, peers and siblings. One of the most disturbing elements of this aggression is that it is often accompanied by a detached, cold lack of empathy. They may show regret (an intellectual response) but not remorse (an emotional response) when confronted about their aggressive or cruel behaviors.

Responsive adults, such as parents, teachers, and other caregivers make all the difference in the lives of maltreated children. The next article in this series, "Bonding and Attachment in Maltreated Children: How You Can Help," suggests some strategies to use to make a difference in a child's life.

\*Adapted in part from: *"Maltreated Children: Experience, Brain Development and the Next Generation"* (W.W. Norton & Company, New York, in preparation)

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#### **SIDEBAR:**

Dr. Bruce D. Perry, M.D., Ph.D., is an internationally recognized authority on brain development and children in crisis. Dr. Perry leads the ChildTrauma Academy, a pioneering center providing service, research and training in the area of child maltreatment ([www.ChildTrauma.org](http://www.ChildTrauma.org)). In addition he is the Medical Director for Provincial Programs in Children's Mental Health for Alberta, Canada. Dr. Perry served as consultant on many high-profile incidents involving traumatized children, including the Columbine High School shootings in Littleton, Colorado; the Oklahoma City Bombing; and the Branch Davidian siege. His clinical research and practice focuses on traumatized children-examining the long-term effects of trauma in children, adolescents and adults. Dr. Perry's work has been instrumental in describing how traumatic events in childhood change the biology of the brain. The author of more than 200 journal articles, book chapters, and scientific proceedings and is the recipient of a variety of professional awards.