

# Repairing Failures in Bonding Through EMDR

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**Abstract:** Maternal-infant bonding is an intense emotional tie between mother and infant that often begins during pregnancy and continues after birth. Prolonged physical separation from one's infant or traumatic interference can sometimes impede this process, leading to a lack of bonding. Whereas many medical procedures and illnesses can cause mother and child to become separated immediately after birth and affect bonding, other causes of emotional separation may be somewhat more difficult to identify. Nevertheless, maternal trauma has been identified as one such form of emotional separation that can interfere with bonding. This article illustrates the application of Eye Movement Desensitization and Reprocessing (EMDR) for addressing bonding difficulties related to trauma issues. EMDR is an integrative psychotherapy that uses a standardized eight-phase approach to treatment and is a well-accepted treatment for trauma. Although more research is needed, this case suggests that EMDR may be an appropriate and efficient treatment for bonding difficulties.

**Keywords:** bonding; maternal-infant bonding; eye movement desensitization and reprocessing; EMDR; attachment

## 1 THEORETICAL AND RESEARCH BASIS

Maternal-infant bonding has been described as an intense physical, emotional, and spiritual connection between mother and infant. This connection leads to a complex interaction in which this strong union is mutually expressed, appreciated, and reinforced. Immediately after birth, mother and baby often move through a behavioral sequence involving mutual gazing, touching, fondling, nuzzling, and kissing (Klaus & Kennell, 1976). This maternal-infant bond is the foundation for the infant's later attachments and forms the basis for his or her sense of himself or herself (Klaus & Kennell,

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CLINICAL CASE STUDIES, Vol. 2 No. X, Month 2003 1-

DOI: 10.1177/1534650104267403

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1982). It appears as though the strength and richness of this connection will have a significant bearing on the child's ability to form and maintain attachments throughout life.

Mothers who do not have sufficient early contact with their infants may act differently from those who do. In many studies conducted over 30 years, the negative consequences of separation have been explored and described. For example, Klaus and his associates (1972) compared the behavior of two groups of mothers: one group had routine contact that included separation (except for brief contact for identification at 6-12 hours after birth) and a second group had extra contact (1 hour of contact with the nude infant within 3 hours of birth, plus 5 additional hours of contact each day over the next 3 days). At 1 month, compared with the control, the extra contact mothers demonstrated more soothing, fondling, and eye-to-eye contact during feeding. At 1 year, the extra contact mothers soothed the infant more during physical examinations.

Sousa and associates (1974) gave an extra contact group early and continuous contact, placing the infant crib beside the mother. The normal routine group was just given a glimpse of the baby at birth followed by a 12- to 24-hour separation with 30-minute contacts every 3 to 4 hours. At 2 months, 77% of the extra contact mothers were still lactating, compared with 27% of normal routine mothers. Johnson (1976) found similar results: At 2 months, five out of six early contact mothers were still breastfeeding, but only one out of six late contact mothers were doing so.

de Chateau (1976) found that extra contact mothers (who were not separated from their infants) almost always held the newborn on their left arm. If there was a separation of 24 hours or more (considered the normal routine), the babies were held on the mother's right side and there was less overall contact. One third of the normal routine mothers were seen to carry their infant awkwardly in their hands rather than in their arms. At 3 months, extra contact mothers kissed and looked lovingly at their babies more often, cleaned them less, and breastfed more. At 3 months, their babies smiled and laughed more and cried less.

O'Connor, Vietze, Sherrod, Sandler, and Altemeier (1980), in a study of low-income mothers, gave an extra contact group 6 additional hours with their infants each day for 2 days, compared with a normal routine group whose contact was limited to 20 minutes every 4 hours for feeding. During a 17-month follow-up, they found that normal routine babies experienced more abuse, neglect, abandonment, and nonorganic failure to thrive. Similarly, in a hospital in Thailand where there were many instances of babies abandoned by their mothers, the introduction of rooming-in and early contact with suckling reduced the frequency of abandonment from 33 in 10,000 births a year to 1 in 10,000 (Kennell & Klaus, 1998). The authors state that when early contact and rooming-in were introduced in Russia, the Philippines, and Costa Rica, comparable results were noted.

From these and other studies, there is reason to believe that, compared with those who are not separated from their babies, mothers who have restricted access treat their infants differently. Although the behaviors may be subtle, nonbonding can be detected,

especially if a therapist is aware of the clues. Although the terms are occasionally used interchangeably, the term *bonding* usually “refers to the emotional tie from parent to infant; attachment generally is used for the tie from infant to parent” (Kennell & Klaus, 1998, p. 4). A lack of bonding is different from an attachment disorder. According to Bowlby (1978), a bonding failure refers to and results in a lack of feelings in the mother. Bonding problems are not usually categorized as a DSM disorder.

Bonding often starts during pregnancy and increases after birth. Although the 1st hour after birth seems to be a significantly valuable time in the bonding process (Kennell & Klaus, 1998), the feeling of maternal love does not always arrive for every mother immediately at birth. A good percentage of mothers report that they first felt bonded to their baby some time later, even a week afterward. Failures to bond, however, are generally thought to be associated with prolonged separation after birth or with emotional separation caused by traumatic interference. The former can occur when infants are kept in an intensive care nursery, when a mother is sick and unable to be with her baby, when there is general anesthesia, or when a mother is sent home without her baby. Adopted children, understandably, may also often fall into this category. Mothers are extremely resilient and can often overcome such separations, but when they cannot, it is a bonding problem.

Although physical separation is easily identified, emotional separation, which may also be at the root of a bonding problem, may not be readily recognized. Emotional separation can be caused by traumatic interference, which may occur when a mother is experiencing an emotion that is so strong that it competes and interferes with the emotions of bonding. For example, if a mother has just lost her father and she is about to deliver, it may be difficult for her to bond with her baby. Similarly, if her husband has recently left her for another woman, she may have a difficult time bonding with her baby. The probability of bonding will be diminished following such events as a death in the family, moving to another town, a husband’s desertion, a recent miscarriage, an abortion, infidelity of a husband, or sickness of a close relative (Klaus, Kennell, & Klaus, 1995; Madrid, Ames, Horner, Brown, & Navarrette, 2004). Klaus and Kennell (1976) report that detrimental effects may occur if the mother has had something traumatic happen within 2 years of the time of the birth. They have further reported (Kennell & Klaus, 1998) that, generally, parents can only become attached to one infant at a time, which can negatively affect bonding to twins and triplets.

When a mother is not bonded, a therapist often hears her say that there has been something wrong with her child right from the beginning or that it was never cuddly or affectionate. She may say that they never got along or that the baby did not seem to love her. Observers may note that there are parenting difficulties or that the mother does not seem to know how to interact with her baby. Such a child may be described as colicky or difficult to comfort. Occasionally, a mother will frankly state that she does not have any feelings for her child, despite a desire to be otherwise. It is this lack of maternal feeling that is at the heart of failures to bond.

## 2 CASE PRESENTATION AND PRESENTING COMPLAINTS

Lucile, whose name and identifying information have been changed to protect her anonymity, is a typical example of one of the 75 cases of bonding difficulties treated by the first two authors. She was referred by a graduate student who knew of our work. Lucile was the mother of a 5-year-old daughter. Her complaint was that she did not like being a mother. In her words, “My daughter wears me down and pulls on me all the time. She rubs on me; we grate on one another. I don’t even like being around her.” She was disappointed about this because she had looked forward to being a mother. She shook her head in disbelief: Her life as a mother was terrible.

Lucile’s friend, the graduate student, provided encouragement by informing her that her feelings were quite ordinary for mothers who had difficult pregnancies and births. Lucile had always felt that it was her fault, but she was now beginning to believe that it was the result of things beyond her control.

## 3 HISTORY

When she described her pregnancy, delivery, and postpartum period, the reasons for Lucile’s lack of maternal feelings were obvious. It was a planned pregnancy, but almost everything else was accidental and distressing. She and her husband had been living in a small town that they loved and where they had close friends. In her first trimester, her husband was transferred to another town, 800 miles away, where they knew no one. Lucile soon became severely nauseated, and it lasted until she delivered. During the 9 months of pregnancy, she was continuously nauseous and vomited daily, which required her to stay in bed most of the time, under close medical supervision. She described the pregnancy as “one long nightmare.”

The labor was hard and long, lasting 35 hours. An emergency Caesarean section was eventually required. Battered and exhausted, Lucile did not remember seeing her baby or even knowing the gender. She fell asleep and when she awoke 3 hours later, asking for her baby, the staff did not accommodate her. She was not allowed in the nursery to see her baby. After several hours, the baby was brought to her and she remembered thinking, “Something is wrong here. I don’t feel anything.”

Before she left the hospital, Lucile was told that she had diabetes and required treatment. She went home feeling physically terrible and depressed. She remembered thinking about her life and her baby, “What’s the point of all this?” After 5 months, she was placed on antidepressants, which eventually helped to resolve her acute depression. However, she felt that she was “out of it” for the entire 1st year.

## 4 ASSESSMENT

A question that often identifies nonbonding is, “How did you feel when you first held or saw your baby?” Bonded mothers commonly report that they were ecstatic, thrilled, moved, or otherwise swept away by wonderful emotions. Mothers who did not bond may say that they were frightened, unsure what to do, nonplused, surprised that this was their baby, or otherwise nonexuberant. Some say that they do not remember.

Although the answer to this question may identify a nonbonded mother and child, to provide appropriate treatment, additional information is often required. We use the following inventory to help us identify events that are commonly linked with bonding problems. Experiences such as these were termed *nonbonding events* by Pennington (1991).

### NONBONDING EVENTS

#### Physical Separation

- Mother was separated from child at or after birth.
- Mother had a very difficult delivery.
- Child was sick at birth.
- Intensive care nursery or incubator.
- Mother was anesthetized at birth.
- Mother was very sick after the birth.
- Mother was separated from child in 1st month.
- Child was adopted.
- Other significant separation occurred.

#### Emotional Separation

- Mother had emotional problems during pregnancy.
- Mother had emotional problems after birth.
- Mother had a death in the family within 2 years of birth.
- Mother had a miscarriage within 2 years of birth.
- Mother and father were separated before birth or soon after.
- Serious marital problems.
- Mother was addicted to drugs or alcohol at birth.
- Mother moved before or soon after birth.
- Severe financial problems.
- Unwanted pregnancy.
- Child was twin or triplet.
- Other event that could have interfered with bonding.

## 5 CASE CONCEPTUALIZATION

Hypnosis has previously been identified as a method to repair the broken maternal-infant bond in the treatment of pediatric asthma (Madrid et al., 2004; Madrid, Ames, Skolek, & Brown, 2000; Madrid & McPhee, 1985; Madrid & Pennington, 2000). Because trauma is often at the root of the nonbond, Eye Movement Desensitization and Reprocessing (EMDR; Shapiro, 2001) also presents itself as a natural and effective therapeutic process to repair the fractured bond. In fact, EMDR has been used to resolve maternal trauma issues and subsequently improve the maternal-child interaction (Lovett, 1999; Shapiro & Forrest, 1997; Shapiro & Maxfield, 2003; Tinker & Wilson, 1999). This article will describe a specific bonding therapy using EMDR.

As an integrative psychotherapy, EMDR has been recognized as an effective treatment for posttraumatic stress disorder (PTSD) (Bleich, Kotler, Kutz, & Shaley, 2002; Chemtob, Tolin, van der Kolk, & Pitman, 2000; Clinical Resource Efficiency Support Team, 2003; Department of Veterans Affairs & Department of Defense, 2004), with many randomized studies supporting its efficacy (Carlson, Chemtob, Rusnak, Hedlund, & Muraoka, 1998; Ironson, Freund, Strauss, & Williams, 2002; Jaberghaderi, Greenwald, Rubin, Dolatabadim, & Zand, in press; Lee, Gavriel, Drummond, Richards, & Greenwald, 2002; Marcus, Marquis, & Sakai, 1997; Power et al., 2002; Rothbaum, 1997; Scheck, Schaeffer, & Gillette, 1998; Soberman, Greenwald, & Rule, 2002; Wilson, Becker, & Tinker, 1997; Wilson, Tinker, & Becker, 1995; for reviews, see also Maxfield & Hyer, 2002; Perkins & Rouanzoin, 2002; Shapiro, 2001). The adaptive information processing (AIP) model is the theoretical framework behind EMDR and provides an explanation for the effect of traumatic experiences on functioning (Shapiro, 2001).

The AIP model describes a learning process by which new experiences are linked with similar ones within the memory network to make sense of the related information. In addition, forging of appropriate associations to bring disturbance to an adaptive resolution is one of the functions of information processing. However, the intense affect accompanying trauma can interfere with this process, isolating the traumatic experience, including the related thoughts, emotions, and sensations, within the memory network. Subsequent similar experiences may then activate this material, potentially triggering the nightmares, flashbacks, and intrusive thoughts associated with PTSD, as well as the negative affects, sensations, and beliefs associated with other clinical complaints (Shapiro, 2001, 2002).

In terms of defining trauma, the AIP model delineates between “large-T” and “small-T” traumas. Large-T events are those Criterion A events necessary to diagnose PTSD. They are easily recognized as traumatic and may include experiences such as assaults, natural disasters, and traffic accidents. Small-T traumas, on the other hand, include comparatively minor events such as experiences of humiliation, rejection, and neglect, which may negatively affect the information processing system. Many types of

separations and loss, although not raising to the level of Criterion A events, can still be considered traumatic and may negatively affect the mother's caretaking ability.

Although a mother's ability to bond with her infant may be affected by many factors, a traumatized mother may find it difficult to respond appropriately to the needs of her infant (Hesse & Main, 1999, 2000). Rather than responding in a caring and nurturing fashion to her infant's cries, this mother may unknowingly distance herself and react with anxiety, fear, anger, sadness, or distress. If the mother frequently responds in this manner, the child is likely to experience physiological and psychological consequences (Hesse & Main, 1999, 2000; Perry, 1997; Schore, 1994; Shapiro & Forrest, 1997; Shapiro & Maxfield, 2003; Siegel, 1999, 2002; van der Kolk, 2002). Processing the trauma through EMDR treatment may provide some resolution for the mother, freeing her to respond appropriately and to provide nurturance to her child. Subsequent treatment of the child's attachment difficulties is also important, if not spontaneously resolved by the new dyadic interaction.

EMDR is an eight-phase treatment using standardized procedures and protocols that have been designed to facilitate information processing by connecting the dysfunctionally stored traumatic memory with more adaptive information in other memory networks. During part of the EMDR treatment, all aspects of the memory, including the image, cognitions, affect, and bodily sensations, are accessed while the client simultaneously focuses on a form of dual attention stimulation, such as bilateral eye movements, tones, or hand taps. A client-directed, free associative process is used to elicit further information as the client is directed to "let whatever happens, happen."

Several studies have investigated hypotheses concerning the role of the eye movements in the therapeutic process. The observed decrease in arousal, emotionality, and vividness of memory has been posited to be the result of an evoked orienting response (Barrowcliff, Gray, Freeman, & MacCulloch, in press; Barrowcliff, Gray, MacCulloch, Freeman, & MacCulloch, 2003). Others have posited a direct effect on the visuospatial sketchpad of working memory (Andrade, Kavanagh, & Baddeley, 1997; Kavanagh, Freese, Andrade, & May, 2001; Sharpley, Montgomery, & Scalzo, 1996; van den Hout, Muris, Salemink, & Kindt, 2001). The accessing of more adaptive information during EMDR has been posited to be linked with the processes of REM sleep (Shapiro, 1989, 2001; Stickgold, 2002) and some empirical support has been found for this thesis as well (Christman, Garvey, Propper, & Phaneuf, 2003; Kuiken, Bears, Miall, & Smith, 2001-2002).

Eye movements and other forms of dual attention stimulation used in EMDR are incorporated within the context of a comprehensive treatment, which uses eight standardized phases (Shapiro, 2001). The EMDR therapist begins by determining the client's readiness for treatment and identifying the appropriate targets for processing (Phase 1: Client History). The client is then given the requisite education and is prepared for the potentially intense nature of treatment (Phase 2: Preparation). When the target is accessed for processing, there is a structured identification of the relevant components,

including the image, cognitions, emotions, and sensations (Phase 3: Assessment). Ratings of the client's distress (Subjective Units of Disturbance; SUD) and cognitive assessment (Validity of Cognition; VOC) are obtained to monitor the client's progress, as (a) past events, (b) present triggers, and (c) future templates are targeted for reprocessing. This reprocessing occurs in Phases 4 through 6 (Desensitization, Installation, and Body Scan; see Shapiro, 2001, for a full delineation of phases).

In the case of nonbonding, the therapist targets the identified nonbonding event or impediment that interfered with bonding and focuses on this during the reprocessing phases. For example, if the mother's father died a month before the baby was born, during the assessment phase she is asked to focus on his death, bringing up an image that represents that time, along with the negative self-defining belief (e.g., I can't be a mother now), the alternative positive belief (e.g., I have love in my heart for my baby), the negative emotion (e.g., sadness), and physical sensation (e.g., "my chest is caving in"). Baseline ratings are obtained of emotional distress (0-10 SUD scale) and the perceived validity of the positive cognition (1-7 VOC).

During processing, sets of eye movements (or other bilateral stimulation) are initiated according to the standardized EMDR procedures and protocols until the sadness is no longer felt (e.g., SUD of 0 or 1 out of 10) and the positive cognition is felt to be "completely true" (i.e., VOC 7). Each of the events that impeded bonding is processed in this fashion, until none remain. For example, her father's death is processed, then the child's sickness and subsequent removal to an intensive care nursery, then returning home without the baby, and then her mother criticizing her when she got home. These past events are targeted and processed until they no longer trigger negative emotions or cognitions for the mother. During processing, new insights and emotional shifts will be apparent.

Mothers are often surprised at the intensity of the emotions that are evoked during this part of the therapy. Understandably, mothers often hide how horribly they feel about the disrupted birth of their child. We have heard mothers say, "I forgot how bad I felt; now, it's clear why this was so hard on me." This newly awakened memory of the trauma and its subsequent processing is reported to be very cleansing and relieving—a perfect first step toward a new relationship with her child.

When all of the nonbonding events are resolved and current disturbing triggers are addressed, then the new birth template is ready to be evoked. The mother may have already started to imagine a new birth during previous sessions. If so, one needs only to embroider upon that. If not, a future template is created by asking her to imagine, in stages, how the birth could have been without this trauma and to report on how real it seems.<sup>1</sup> This is then reinforced through a series of short sets of eye movements.

During this phase of treatment, we typically evoke positive imagery to emphasize all of the stages of pregnancy and birth, from first learning of the pregnancy, through all of the three trimesters, and eventually to the labor, delivery, and first breath. The immediate postpartum period, including the first few hours, the remainder of the hospital

time, and the first few days at home, right up to the first few weeks and months, is also emphasized. It is important to go through the time that the original trauma or nonbonding event existed. For example, if her father died during the second trimester, she is asked to imagine how that trimester would have felt without that sadness. Once she is able to experience that feeling, it is reinforced with a series of eye movement sets.

If the mother cannot feel “real” about a particular stage or image, we have found that it usually means that there is a trauma or issue that has not yet been resolved. She is asked to return to that and to process it fully. Once this has been accomplished, she can return successfully to the new birth image. The therapist may ask the mother to bring this new history right up to the present time. Mothers frequently report that they now know how it would have felt to give birth to their child in this fashion.

The client is instructed to keep a log between sessions to identify further targets for treatment (Closure Phase). The final phase of treatment, Reevaluation, occurs at the beginning of each subsequent session, whereby the therapist determines whether treatment effects have been maintained.

## 6 COURSE OF TREATMENT AND ASSESSMENT OF PROGRESS

A few months after the birth of her daughter, Lucile entered supportive therapy; although she felt that she benefited from the counseling and felt better about herself, she still did not feel any closer to her daughter. When she entered therapy specifically for the bonding problem, she was prepared for a different type of treatment that focused on the bonding itself. The theory of maternal-infant bonding was explained to her, reinforcing what she had already learned from her friend. She was told that immediate contact is important for establishing maternal feelings and that this was impeded by her separation from her daughter. She was also separated emotionally because of her nausea, the difficulties in moving, the difficult delivery, and her illness afterward. Bonding was not possible under those circumstances. She was informed that it was not her fault and that this would have happened to any mother.

The course of therapy was then explained. There were four targets identified from the start: (a) the move, (b) the pregnancy and nausea, (c) labor, and (d) postpartum recovery.

Whereas the first session focused on client history and problem identification, the focus of the second session was using EMDR to process the move and the pregnancy. She remembered lying on the couch, being sick, and having no friends or family around. She also recalled being homesick, having terrible neighbors, and being very lonely. The sadness and loneliness were reduced to a SUD level of 0 or 1 and the remainder of the session focused on her severe sickness. Although she processed this difficult pregnancy for approximately 20 minutes, her SUD level did not lower significantly. Some Closure

(Phase 7) techniques were used to stabilize her, and she was instructed to keep a log of any distress.

By the third session, Lucile's SUD level from the move was still at 0-1. The rest of the session was spent on the physical difficulties of the pregnancy. Lucile recalled being sick on the couch and the sense that nobody got it that she was severely sick. She acknowledged that this was a very difficult time for her and that she found it difficult to love something that was making her feel so sick. She experienced feelings of hopelessness and frequently wished that she could experience a good pregnancy. Seeds about this alternative pregnancy were cultivated by asking her how she might envision that. She spent a few moments imagining that.

Lucile started the fourth session mentioning that her relationship with her daughter had improved "for no specific reason." We checked the SUD level for the move (a) and the pregnancy (d). More EMDR was continued concerning the pregnancy, targeting memories of being sick on the couch as well as the 35 hours of labor, including memories of torturous attempts to deliver, the baby being in distress, and the horrible medical care. The belief that her experience was similar to the torture that occurred in concentration camps arose. Eventually, the SUD level related to Lucile's thoughts of being sick during the pregnancy was reduced to 0-1. However, further targets included postpartum memories of still being sick, having a nightmare the first night at home, and the lack of proper medical follow-up.

By session five, Lucile reported that she had a good couple of weeks and that her relationship with her daughter had continued to improve after each session. The SUD level for her memory of the pregnancy was 5 and 4 for her memory of the delivery. Two sets of eye movements for each of them brought them down to 0. The postpartum section now became the focus and her feelings of loneliness, including the difficulties associated with not having friends, were targeted. Lucile remembered that she hated being a mother and felt strongly that her difficult pregnancy and labor should be validated. Once again, the theme of sickness (e.g., diabetes) arose, with Lucile wondering if she would have to pay for this for the rest of her life. Having to return to work was also an issue at this stage. Lucile's postpartum SUD level eventually decreased to 0-1.

Lucile was now ready to imagine a new birth. In fact, she had already begun to bring up seminal images at the end of the previous two sessions. She was asked to imagine the first trimester as healthy and to grade it (from A to F). She indicated that it was very real, an "A." Two sets of seven eye movements were used to solidify this memory. She also imagined a new second trimester, but it was only a "C" in reality.

She processed that time with EMDR, tearfully giving rise to a number of issues. Once again, Lucile recalled that it was difficult to love something that made her feel severely sick. She also felt that those close to her did not provide her with the support she needed and that her doctor's style of care was not helpful. By the end of processing, Lucile's SUD level had decreased to 0.

She processed the second trimester, the new way, which was now an “A” for feeling real. The third trimester had hitches as she remembered her heartburn and further physical problems. After three sets of eye movements, those memories were brought to a SUD level of 0. Now she could imagine the third trimester perfectly, with real feelings and images. She then saw her healthy baby, and the image was graded as an “A” for feeling real. On the whole, this was a successful session for installing the template of the new birth. Each hitch had a reason and was processed quickly, allowing her to feel the reality of the new birth.

Lucile started the sixth session by providing two indications that the bonding therapy had worked. First, she said that this was the first time since her daughter was born that she had not been depressed at this time of year. She reported that things have “definitely changed” and that her daughter had changed from “being a chore to being the love of my life.” The rest of the session was spent checking to see if anything had slipped. The SUD levels for all three trimesters, labor, birth, and the first 3 months were still at 0 and the template of the new pregnancy and birth felt real (A). Lucile’s new way of recalling the birth was that “she popped right out; I breast fed; she slept with me.”

## 7 FOLLOW-UP

Three weeks after the last session, Lucile reported that she was able to think about the pregnancy and birth without feeling bad. She reported that her relationship with her daughter continued to be full of warm feelings and that her daughter was the love of her life. She had told her friend, the graduate student, the entire story and was able to remember more of it than ever before. After she finished telling the story, her daughter came up to her and they gazed into each other’s eyes for a long time. They were both filled by this experience.

Checking the target areas related to the move, the pregnancy, and the C-section revealed that they continued to be resolved. However, the couple of months following the birth continued to be somewhat problematic. Further EMDR targeted issues related to having diabetes, hating being a mother, loneliness and a lack of friends, beginning work after 18 months, and her need to be validated. Fatigue was now the only problem.

Lucile brought all of the above areas down to a SUD level of 0-1 and reiterated that this was the first winter free of depression since her daughter’s birth. She felt that therapy was done, because she now knew what it was like to love her daughter.

After 6 months, she sent a thank you card, writing, “Thanks for helping me to change my life. And my daughter thanks you, too. Best wishes, Lucile.”

She was contacted a year after therapy ended, and she stated,

We are doing really well. I still feel like we really, finally bonded. The other day she said: “Mom, I wish I had three of you, then if I lost one, I’d still have two more.” She is always say-

ing things like that. And often, when she plays by herself, she is singing or humming. I feel like she's really a happy kid.

## 8 TREATMENT IMPLICATIONS AND RECOMMENDATIONS TO CLINICIANS AND STUDENTS

When the causes of bonding problems are clear, bonding therapy using EMDR may be an effective and efficient treatment option. It is a very natural thing for mothers to be bonded to their babies, and unless there is some major impediment, it usually occurs (Klaus & Kennell, 1982). When it does not occur, something has most likely interfered.

Discovering what interrupted the bond is an easy process for an appropriately trained therapist. The impediments to bonding are limited in scope and usually involve either physical separation or maternal trauma around the pregnancy, birth, or postpartum periods. When the nonbonding event is identified, EMDR offers a unique combination of procedures that can be used to process the trauma and to incorporate a sense of a new and positive birth. Once that occurs, a mother will automatically start feeling better about her child.

Previous research shows that the younger the child, the easier the therapy (Madrid et al., 2000), because the child will automatically respond positively to the mother's new outlook. Because adolescents are increasing their independence, they may not respond as favorably to the mother's new feelings of being close to them. When this is the case, we have found it useful to process the adolescent's negative memories. We think, however, that this therapy can be attempted for children of any age. In fact, we have used it with mothers of adult children.

In one such case, a mother's bonding was impeded by an automobile accident on the way to the hospital to give birth and she did not see her child for a full day. Her son had been a difficult child his whole life. This 24-year-old son declared to his mother, unaware of the therapy she just experienced, "Mom, I want you to know that I love you." This was the first time that she had heard that statement since he was a little child. An important outcome of this therapy is that once the mother feels bonded to her child, the child immediately notices it and generally starts responding differently. As predicted by interactional models (Kaslow, Nurse, & Thompson, 2002), a change in one member of the family system is reflected in the others. Thus, the therapy is done with the mother alone, and the child feels it and responds to it.

Lucile's feelings about her daughter brought about changes in the daughter, without any therapy plan or work with the daughter directly. The therapy focused entirely on the trauma that Lucile suffered, which was responsible for impeding the original bond. These traumas, as therapy unfolded, included being sad and alone, hopelessly nauseated and scared, unsupported by medical staff, family, or neighbors, experiencing a torturous labor, being physically ill afterward, experiencing depression, and being out of it for a year afterward. Although some of these traumas, no doubt, had tendrils that went to

her childhood, in this case Lucile's birth traumas were eventually cleared without having to delve deeply into those issues. If a new birth could not be imagined, then perhaps the work would have gone more directly into her childhood (Shapiro, 2001, 2002).

The therapy is quite straightforward, flowing from Shapiro's information processing model and Klaus and Kennell's theory of maternal-infant bonding. It seems that mothers and babies are living bonding components, just waiting to connect. Although further controlled research is needed, this case would suggest that EMDR may be an appropriate and efficient treatment option. In addition, bonding therapy might be considered in working with small children, whenever a bonding failure seems apparent and in particular when the cause of the bonding failure is obvious. It also appears that pediatric asthma associated with bonding problems is amenable to EMDR resolution (Madrid et al., 2004).

Parenting problems, especially with children who have been difficult from the very beginning, often can be helpfully viewed and treated from the perspective of bonding failures. Therefore, clinicians and social service workers could take steps to identify postpartum separations, maternal losses, or any other experiences that might be causing maternal-child difficulties. Such processing may treat the very cause of the trouble and potentially eliminate years of painful parenting problems. In addition, the personal and social consequences of dyadic estrangement can potentially be avoided in those children who have been identified as high risk. It is our observation that behavioral problems, emotional difficulties, attention trouble, asthma, and defiance issues frequently dissolve when the bonding is corrected.

To date, we have treated bonding problems in 75 parent/child dyads, using EMDR or hypnosis, with excellent results. Further research should include behavioral checklists to verify these clinical impressions.

## NOTE

1. We asked the mothers to grade the "realness" of their images from A, for "very real," to F, "not real at all."

## REFERENCES

- Andrade, J., Kavanagh, D., & Baddeley, A. (1997). Eye-movement and visual imagery: A working memory approach to the treatment of post-traumatic stress disorder. *British Journal of Clinical Psychology, 36*, 209-223.
- Barrowcliff, A. L., Gray, N. S., Freeman, T.C.A., & MacCulloch, M. J. (in press). Eye-movements reduce the vividness, emotional valence and electrodermal arousal associated with negative autobiographical memories. *Journal of Forensic Psychiatry and Psychology*.
- Barrowcliff, A. L., Gray, N. S., MacCulloch, S., Freeman, T.C.A., & MacCulloch, M. J. (2003). Horizontal rhythmical eye-movements consistently diminish the arousal provoked by auditory stimuli. *British Journal of Clinical Psychology, 42*, 289-302.

- Bleich, A., Kotler, M., Kutz, E., & Shaley, A. (2002). *A position paper of the (Israeli) National Council for Mental Health: Guidelines for the assessment and professional intervention with terror victims in the hospital and the community.*
- Bowlby, J. (1978). Attachment theory and its therapeutic implications. *Adolescent Psychiatry, 6*, 5-33.
- Carlson, J. G., Chemtob, C. M., Rusnak, K., Hedlund, N. L., & Muraoka, M. Y. (1998). Eye movement desensitization and reprocessing for combat-related posttraumatic stress disorder. *Journal of Traumatic Stress, 11*, 324.
- Chemtob, C. M., Tolin, D. F., van der Kolk, B. A., & Pitman, R. K. (2000). Eye movement desensitization and reprocessing. In E. B. Foa, T. M. Keane, & M. J. Friedman (Eds.), *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies* (pp. 139-155, 333-335). New York: Guilford.
- Christman, S. D., Garvey, K. J., Propper, R. E., & Phaneuf, K. A. (2003). Bilateral eye movements enhance the retrieval of episodic memories. *Neuropsychology, 17*, 221-229.
- Clinical Resource Efficiency Support Team. (2003). *The management of post traumatic stress disorder in adults.* Belfast: Northern Ireland Department of Health.
- de Chateau, P. (1976). *Neonatal care routine: Influences on maternal and infant behavior and on breast feeding.* Umea, Sweden: Umea University Medical Dissertations.
- Department of Veterans Affairs & Department of Defense. (2004). *VA/DoD clinical practice guideline for the management of post-traumatic stress.* Washington, DC: Author.
- Hesse, E., & Main, M. (1999). Second-generation effects of unresolved trauma in non-maltreating parents: Dissociated, frightened, and threatening parental behavior. *Psychoanalytic Inquiry, 19*, 482-540.
- Hesse, E., & Main, M. (2000). Disorganization in infant and adult attachment: Description, correlates, and implications for developmental psychopathology. *Journal of the American Psychoanalytic Association, 48*, 1097-1127.
- Ironson, G. I., Freund, B., Strauss, J. L., & Williams, J. (2002). Comparison of two treatments for traumatic stress: A community based study of EMDR and prolonged exposure. *Journal of Clinical Psychology, 58*, 113-128.
- Jaberghaderi, N., Greenwald, R., Rubin, A., Dolatabadim, S., & Zand, S. O. (in press). A comparison of CBT and EMDR for sexually abused Iranian girls. *Clinical Psychology and Psychotherapy.*
- Johnson, N. W. (1976). Breast feeding at one hour of age. *American Journal of Maternal Child Nursing, 1*, 12.
- Kaslow, F. W., Nurse, A. R., & Thompson, P. (2002). EMDR in conjunction with family systems therapy. In F. Shapiro (Ed.), *EMDR as an integrative psychotherapy approach: Experts of diverse orientations explore the paradigm prism* (pp. 289-318). Washington, DC: American Psychological Association.
- Kavanagh, D. J., Freese, S., Andrade, J., & May, J. (2001). Effects of visuospatial tasks on desensitization to emotive memories. *British Journal of Clinical Psychology, 40*, 267-280.
- Kennell, J. H., & Klaus, M. H. (1998). Bonding: Recent observations that alter perinatal care. *Pediatric Review, 19*, 4-12.
- Klaus, M. H., Jerauld, R., Kreger, N., McAlpine, W., Steffa, M., & Kennell, J. H. (1972). Maternal attachment: Importance of the first post-partum days. *New England Journal of Medicine, 286*, 460-463.
- Klaus, M., & Kennell, J. (1976). *Maternal-infant bonding.* St. Louis: M. V. Mosby.
- Klaus, M., & Kennell, J. (1982). *Parent-infant bonding.* St. Louis: M. V. Mosby.
- Klaus, M., Kennell, J., & Klaus, P. (1995). *Bonding.* New York: Addison-Wesley.
- Kuiken, D., Bears, M., Miall, D., & Smith, L. (2001-2002). Eye movement desensitization reprocessing facilitates attentional orienting. *Imagination, Cognition and Personality, 21*, 3-30.
- Lee, C., Gavriel, H., Drummond, P., Richards, J., & Greenwald, R. (2002). Treatment of post-traumatic stress disorder: A comparison of stress inoculation training with prolonged exposure and eye movement desensitization and reprocessing. *Journal of Clinical Psychology, 58*, 1071-1089.
- Lovett, J. (1999). *Small wonders: Healing childhood trauma with EMDR.* New York: Free Press.
- Madrid, A., Ames, R., Horner, D., Brown, G., & Navarrette, L. (2004). Improving asthma symptoms in children by repairing the maternal-infant bond. *Journal of Prenatal and Perinatal Psychology and Health, 18*(3), 221-231.

- Madrid, A., Ames, R., Skolek, S., & Brown, G. (2000). Does maternal-infant bonding therapy improve breathing in asthmatic children? *Journal of Prenatal and Perinatal Psychology and Health, 15*, 90-112.
- Madrid, A., & McPhee, M. X. (1985). The treatment of pediatric asthma through maternal/infant bonding in hypnosis: II. *The Pre and Perinatal Psychology Journal, 1*(1), 24-28.
- Madrid, A., & Pennington, D. (2000). Maternal-infant bonding and asthma. *Journal of Prenatal and Perinatal Psychology and Health, 14*, 279-289.
- Marcus, S. V., Marquis, P., & Sakai, C. (1997). Controlled study of treatment of PTSD using EMDR in an HMO setting. *Psychotherapy, 34*, 307-315.
- Maxfield, L., & Hyer, L. A. (2002). The relationship between efficacy and methodology in studies investigating EMDR treatment of PTSD. *Journal of Clinical Psychology, 58*, 23-41.
- O'Connor, S., Vietze, P. M., Sherrod, K. B., Sandler, H. M., & Altemeier, W. A. (1980). Reduced incidence of parenting inadequacy following rooming-in. *Pediatrics, 66*, 176.
- Pennington, D. (1991). *Events associated with maternal-infant bonding deficits and severity of pediatric asthma*. Unpublished doctoral dissertation, Professional School of Psychology, San Francisco.
- Perkins, B., & Rouanzoin, C. (2002). A critical evaluation of current views regarding eye movement desensitization and reprocessing (EMDR): Clarifying points of confusion. *Journal of Clinical Psychology, 58*, 77-97.
- Perry, B. (1997). Incubated in terror: Neurodevelopmental factors in the cycle of violence. In J. Osofsky (Ed.), *Children, youth and violence: Searching for solutions* (pp. 124-149). New York: Guilford.
- Power, K. G., McGoldrick, T., Brown, K., Buchanan, R., Sharp, D., Swanson, V., & Karatzias, A. (2002). A controlled comparison of eye movement desensitization and reprocessing versus exposure plus cognitive restructuring, versus waiting list in the treatment of post-traumatic stress disorder. *Journal of Clinical Psychology and Psychotherapy, 9*, 299-318.
- Rothbaum, B. O. (1997). A controlled study of eye movement desensitization and reprocessing for posttraumatic stress disorder sexual assault victims. *Bulletin of the Menninger Clinic, 61*, 317-334.
- Scheck, M. M., Schaeffer, J. A., & Gillette, C. S. (1998). Brief psychological intervention with traumatized young women: The efficacy of eye movement desensitization and reprocessing. *Journal of Traumatic Stress, 11*, 25-44.
- Schore, A. N. (1994). *Affect regulation and the origin of self: The neurobiology of emotional development*. Hillsdale, NJ: Lawrence Erlbaum.
- Shapiro, F. (1989). Efficacy of the eye movement desensitization procedure in the treatment of traumatic memories. *Journal of Traumatic Stress, 2*, 199-223.
- Shapiro, F. (2001). *Eye movement desensitization and reprocessing: Basic principles, protocols, and procedures* (2nd ed.). New York: Guilford.
- Shapiro, F. (2002). Paradigms, processing, and personality development. In F. Shapiro (Ed.), *EMDR as an integrative psychotherapy approach: Experts of diverse orientations explore the paradigm prism* (pp. 3-26). Washington, DC: American Psychological Association.
- Shapiro, F., & Forrest, M. S. (1997). *EMDR*. New York: Basic Books.
- Shapiro, F., & Maxfield, L. (2003). EMDR and information processing in psychotherapy treatment: Personal development and global implications. In M. Solomon & D. Siegel (Eds.), *Healing trauma* (pp. 196-220). New York: Norton.
- Sharpley, C. F., Montgomery, I. M., & Scalzo, L. A. (1996). Comparative efficacy of EMDR and alternative procedures in reducing the vividness of mental images. *Scandinavian Journal of Behaviour Therapy, 25*, 37-42.
- Siegel, D. J. (1999). *The developing mind: Toward a neurobiology of interpersonal experience*. New York: Guilford.
- Siegel, D. J. (2002). The developing mind and the resolution of trauma: Some ideas about information processing and an interpersonal neurobiology of psychotherapy. In F. Shapiro (Ed.), *EMDR as an integrative psychotherapy approach: Experts of diverse orientations explore the paradigm prism* (pp. 85-121). Washington, DC: American Psychological Association.
- Soberman, G. B., Greenwald, R., & Rule, D. L. (2002). A controlled study of eye movement desensitization and reprocessing (EMDR) for boys with conduct problems. *Journal of Aggression, Maltreatment, and Trauma, 6*, 217-236.

- Sousa, P.L.R., Barros, F. C., Gazalle, R. V., Begeres, R. M., Pinheiro, G. N., Menezes, S. T., & Arruda, L. A. (1974). *Attachment and lactation*. Paper presented at the 15th International Congress of Pediatrics, Buenos Aires.
- Stickgold, R. (2002). Neurobiological concomitants of EMDR: Speculations and proposed research. *Journal of Clinical Psychology, 58*, 61-75.
- Tinker, R. H., & Wilson, S. A. (1999). *Through the eyes of a child: EMDR with children*. New York: Norton.
- van den Hout, M., Muris, P., Salemink, E., & Kindt, M. (2001). Autobiographical memories become less vivid and emotional after eye movements. *British Journal of Clinical Psychology, 40*, 121-130.
- van der Kolk, B. A. (2002). Beyond the talking cure: Somatic experience and subcortical imprints in the treatment of trauma. In F. Shapiro (Ed.), *EMDR as an integrative psychotherapy approach: Experts of diverse orientations explore the paradigm prism* (pp. 57-83). Washington, DC: American Psychological Association.
- Wilson, S. A., Becker, L. A., & Tinker, R. H. (1997). Fifteen-month follow-up of eye movement desensitization and reprocessing (EMDR) treatment for PTSD and psychological trauma. *Journal of Consulting and Clinical Psychology, 65*, 1047-1056.
- Wilson, S. A., Tinker, R. H., & Becker, L. A. (1995). Eye movement desensitization and reprocessing (EMDR) treatment for psychologically traumatized individuals. *Journal of Consulting and Clinical Psychology, 63*, 928-937.

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