



**THEORETICAL RATIONALE  
for the TREATMENT of DISORDERS of ATTACHMENT  
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**Purpose**

The field of attachment therapy continues to grow and evolve. It currently includes a broad array of interventions and modalities based on common principles and theories of attachment and healthy development. The membership of the Association for Treatment and Training in the Attachment of Children (ATTACH) represents diversity both in terms of professional and parent members, as well as in the utilization of specific interventions and modalities. Attachment therapy has been erroneously construed as synonymous with Holding Therapy. However, attachment therapy increasingly encompasses an ever-expanding continuum of interventions. The unifying theme across this continuum is the goal of providing corrective experiences of attunement. Attunement is the experience of “feeling felt” by another person and “forms the nonverbal basis of collaborative, contingent communication” (Siegel, 1999).

“(A) transforming attuned relationship would involve

the following fundamental elements: contingent, collab-

orative communication; psychobiological state attunement;

mutually shared interactions that involve the amplification

of positive affective states and the reduction of negative ones;

reflection on mental states; and the ensuing development

of mental models of security that enable emotional modulation

and positive expectancies for future interactions” (p. 118).

ATTACH accepts that the use of nurturing holding (as a specific intervention or as a position in which to conduct other interventions) may be one of many tools in the process of attachment therapy. Research- and theory-based explanations for this intervention, indicate that the use of appropriate holding techniques are within the boundaries of currently accepted psychotherapeutic thinking and practice. However, holding is never sufficient in and of itself. If used, it must occur within a context that recognizes and addresses the multifaceted etiology and dynamics of attachment disorders within an integrated, well-reasoned continuum of interventions.

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**This paper has four purposes. First, it seeks to outline research and theory that support the need for a broad continuum of attachment-focused interventions and applications. Second, it seeks to provide a beginning theoretical rationale, as well as precautions, for the use of nurturing holding when appropriate. Third, it seeks to compare and synthesize theoretical rationales from other modalities (i.e., psychodynamic, cognitive-behavioral, and trauma therapy) so that the interventions of attachment therapy can be understood from various conceptualizations. Fourth, it seeks to provide both therapists and parents a theoretically sound rationale against which they can evaluate and adjust applications for specific children with attachment-related disorders.**

**Good practice is based on recognized knowledge, which provides theoretical and empirically based knowledge rationales for interventions utilized by a clinician. Attachment therapy does not have a well-developed body of empirical support of its efficacy or effectiveness. This is not an unusual occurrence within the field of child therapy as a whole, as the accumulation of empirical knowledge is a costly and lengthy process. Given the multifaceted etiology and dynamics of attachment disorders, the development of a reliable empirical knowledge base faces many barriers that will slow the process. That limitation does not excuse us from exercising professional diligence. Therapy should be based upon established scientific and professional knowledge. In emerging and innovative treatments, professional codes of ethics provide important instruction. For example, there is a professional responsibility to exercise judgment and take responsible steps to ensure competence and protection of clients from harm (APA, 2002; NASW, 1996). Further, the therapist should “inform the client of the developing nature of the treatment, the potential risks involved, alternative treatments that may be available, and the voluntary nature of their participation” (APA, 2002). These precautions help insure that the client makes a truly informed decision about the therapy.**

**Attachment therapists face rapidly expanding research findings from the fields of academic attachment, neuroscience, trauma, and developmental psychopathology, among others. In an effort to develop and maintain competency in this ever-changing field, clinicians are struggling to incorporate new research into ever-evolving applications of attachment-informed therapy. “The greater a therapist’s theory base, the less dependence there will be on techniques learned by rote” (Rothschild, 2002). Understanding the basic dynamics of attachment and trauma enables the therapist to choose and adapt interventions to meet the needs of a particular client. This document is intended as an overview of the research and theory, in order to provide a foundation for the interventions used in attachment-focused therapy.**

**One of the major criticisms of the attachment therapy field has been the problems of validity and reliability with the diagnosis of attachment disorder. For many years, authors have discussed the range of serious behavioral disturbances observed in children who are presumed to have attachment disorders deriving from experiences of significant abuse, deprivation, and loss of significant attachment relationships (Levy, 1937; Bender and Yarnell, 1941; Goldfarb, 1943; Tizard and Hodges, 1978; Fahlberg, 1991; James, 1994; Keck and Kupecky, 1995; and Hughes, 1997). Their characterizations of the extreme behavior problems resulted in a burgeoning consensus of how disorders of attachment manifest in clinical presentations.**

**The Diagnostic and Statistical Manual of Mental Disorders (DSM-III) (APA, 1980) provided the first set of diagnostic criteria for Reactive Attachment Disorder. These criteria have been further refined in subsequent editions of the DSM (APA, 1987; 1994). However, the current diagnosis still focuses on the presumed etiology and two subtypes (i.e., Inhibited and Disinhibited), without much elaboration of behavioral criteria. Many clinicians believe the existing diagnostic criteria fail to adequately capture the range of behavioral symptoms (Zeanah, Mammen, and Lieberman, 1993). A critical point these authors make is that**

attachment disorders represent a profound and pervasive disturbance in the child's basic feelings of safety and security (p. 337).

Zeanah, Mammen, and Lieberman (1993, p. 346; expanding on the work of Lieberman and Pawl, 1988, 1990) have proposed an alternative nosology, as well as a list of behavioral disturbances in attachment disorders among young children. These may include extreme examples of: lack of warmth and affection, coupled with indiscriminate affection toward strangers; lack of appropriate or organized comfort seeking behaviors; excessive dependence or compulsive self reliance; problems with cooperation; problems with appropriate exploration; significant controlling behaviors; and finally, failure to reestablish appropriate interactions with caregivers following separations.

Richter and Volkmar (1994) reported on the revisions of this diagnosis for the DSM IV (APA, 1994). They argue that while Reactive Attachment Disorder does not fit attachment as explained by the developmental research, it does provide "clinical evidence for a constellation of symptoms and atypical development not captured by other diagnostic categories" (p. 331). These authors further identify how

"...integrating the findings from diverse fields of research will greatly enhance our ability to identify and treat affected children. In addition, developing a reliable and valid diagnosis will require longitudinal, prospective studies that will help characterize the disorder, validate the criteria, and document developmental trajectories" (p. 332).

Until that level of validity and reliability is reached, these researchers acknowledge the value of diagnosing attachment disorders, when indicated, as a way of facilitating the clinician's understanding of the child's distress and resultant behaviors, so that effective conceptualization and interventions can follow (Zeanah, et al, 1993; Richters and Volkmar, 1994).

## Historical Background

Attachment-focused therapy as endorsed by ATTACH now encompasses a broad continuum of interventions aimed at facilitating the capacity for healthy attachment in children. This continuum is the product of an evolution of techniques and strategies drawing on various well-established modalities of therapy, which have themselves also evolved over time.

The form of attachment therapy originally associated with ATTACH had its roots in the rage reduction therapy of the 1960's and 1970's, which was used to treat severely disturbed children (Zaslow and Breger, 1969). Applications of this therapy were utilized to address the challenges of character-disordered children, whose histories of profound early relational trauma had resulted in hardened characterological defenses against healthy attachment (Cline, 1992). Their personality structures were more primitively organized around defending against the hurtful or withholding caregiver. Thus, their chronic experience of deprivation reinforced defenses against the caregiver, resulting in significant developmental liabilities. Most important among these was the resulting inability to even partially internalize a belief in the possibility of a nurturing caregiver. The capacity to internalize a nurturing caregiver serves

as the critical developmental foundation for the capacity for empathy, intimacy, and prosocial values (Kohut, 1978; Feshbach, 1987). However, children's development can be negatively skewed by the absence of such an internalized experience of attunement or the traumatic disruption of the child's attachment relationship (see review by Kobacks, 1999). This skewed interpersonal development can give rise to antisocial and dangerous traits. Techniques of purposeful provocation were deemed necessary given the level of pathology and hardened defenses exhibited by these children. The rationale for this provocation was the perceived need to induce a heightened level of arousal in the child, in order to access heavily defended feelings of vulnerability and need for connection.

It was this historical beginning that contributed to the ongoing misperception that attachment therapy is still something "done to" the child. Attachment therapy has been mistakenly assumed to be synonymous with other interventions such as rage reduction therapy, rebirthing, etc. It is important to remember this approach to attachment therapy originated in residential and intensive treatment settings for most severely disturbed children.

The form of attachment therapy endorsed by ATTACH today has evolved significantly over the last 30 years. The evolution of techniques mirrors developments in both the academic field of attachment research, as well as in other therapeutic modalities (to be discussed below).

The field of academic attachment research has continued to grow and evolve over the last forty years. Attachment therapy draws on important contributions from many researchers. The following list is meant to be illustrative, but certainly not comprehensive: Allan Sroufe's contributions on the role of attachment in development (Sroufe, 1977; Sroufe, Cooper, & DeHart, 1992); Mary Main's on the role of states of mind in the development of coherent versus incoherent narratives (Main, 1990; Main, 1995; Main & Hesse, 1990); Peter Fonagy's on states of mind and the capacity for the reflective self (Fonagy, 1996; Fonagy, et.al., 1991); Jay Belsky's on the importance of well-synchronized parent-child interactions (Isabella & Belsky, 1991); Daniel Stern on the critical role of affective attunement (Stern, 1985); Allan Schore on the effects of attachment on brain development (Schore, 2001a & b); Daniel Siegel on the effects of attachment on the child's developing mind (Siegel, 1999); Trevarthen on the developmental effects of contingent emotional sharing between the child and parent (Trevarthen, 2001); Emde on the role of emotional connection in developing capacity for morality and emotional regulation (Emde, et al., 1991; Sameroff and Emde, 1989); Greenspan on the developmental remediation approaches (Greenspan, 1997) and interventions with "challenging" children (Greenspan, 1996); and several researchers who continue to develop applications for parent-child therapy with young children (Mary Dozier, 2000 & 1999; Alicia Lieberman, 1992; Marti Erickson and Byron Egeland, 1992; Edward Tronick, 1989; and Paul Trad, 1992).

The important contributions from academic attachment research promote and inform an ever-broadening continuum of interventions for attachment-related difficulties. Today, this continuum of interventions is increasingly grounded in attachment theory and ongoing research; trauma theory and research; and findings from neuroscience and developmental psychopathology. The treatment may include a wide array of interventions that can span a continuum from very relaxed, fun, reciprocal activities (e.g., involving touch, eye contact, and exchange of positive emotions) at one end, to more active containment interventions at the other end. The choice of intervention is dictated by an ongoing assessment of the child's level of functioning, accessibility, and response, as well as the therapist's chosen theoretical orientation and methodology. Not all attachment therapists utilize the full continuum of interventions. A growing number of attachment therapists, who by utilizing interventions from narrative therapy, EMDR, Theraplay, as well as other techniques, are able to promote resolution of attachment issues without the use of directly confrontive techniques.

The unifying theme across the continuum is the provision of a specific type of “corrective emotional experience” (Alexander and French, 1946). This experience is of one of attunement. Attunement is more than sympathy for the child’s distress or imitation of the child’s emotional expression. Rather, it is powerful emotional connection in which the caregiver recognizes, connects with, and shares the child’s inner states (Stern, 1985). The caregiver’s attuned response then matches the child’s expression in a complementary form of intensity and expression. It is the experience of “feeling with rather than feeling for” (McWilliams, 1994). Caregivers who sensitively respond to the affective and attentive rhythms of the child are able to foster developmental organization in the child (Field, 1985).

The provision of attunement is the fundamental guiding principle in attachment therapy. An attuned relationship provides several critical elements: “contingent, collaborative communication; psychobiological state attunement; mutually shared interactions that involve the amplification of positive affective states and the reduction of negative ones; reflection on mental states; and the ensuing development of mental models of security that enable emotional modulation and positive expectancies for future interactions” (Siegel, 1999, p. 118).

This broader perspective derives from important contributions from academic researchers in the field of attachment. Therefore, attachment therapy is not something “done to” the child; it is an interactive process of helping the child forge positive emotional connections with a caregiver. Attachment therapists recognize and respect the risk of retraumatization. This recognition requires that the therapist appreciate that the child’s defensive strategies of avoidance, disconnection, and dissociation evolved as survival strategies and therefore require thoughtful, careful management in doses the child can manage. Attachment therapy is a sensitive, collaborative process of trauma resolution within a context of developmental remediation, in which the new (or rehabilitated) parent actively provides the safe containment, support and attunement necessary to revise conditioned emotional responses that derive from early experiences of maltreatment and deprivation.

Corrective experiences of attunement require sensitive and thoughtful consideration of the nature of the child’s experiences and the coping (indeed, survival) strategies generated by those experiences. Careful attention must also be paid to the type and extent of maltreatment experienced; the age of the child at the time; the resulting developmental effects; as well as current resources and functioning. The differential effects of various types of abuse and neglect are only now beginning to be understood. Increasingly attachment therapists are recognizing more common subtypes of attachment-related psychopathology. One group is the more classical group of children, whose attachment-related problems present with serious aggressive symptoms, similar to the childhood onset subtype of Conduct Disorders (Waldman, Lilienfeld, and Lahey, 1995). Another group consists of children who have experienced such profound neglect that they appear frozen in their disconnected, emotionally void world, while compulsively relying on themselves to the exclusion of all others (Weil, 1992). Another group are those children, who due to prenatal exposure, genetic disorders, and/or other neurological impairment, experience profound difficulties in bonding and attachment (for example, regulatory disorders—Greenspan and Wieder, 1993). While each of these subgroups benefits from the experience of attunement in developing greater capacity for emotional and self-regulation, each subgroup requires sensitively individualized approaches.

Attachment-focused interventions today incorporate strategies from nurturing parenting, trauma therapy, cognitive-behavioral therapy, narrative therapy, psycho-drama, object relations therapy, family therapy, reality therapy, etc. Children treated today with attachment therapy themselves represent a broad continuum of experience. Some have had experiences of abuse and/or deprivation—these forms of maltreatment range from profound to less severe.

Some have had lengthy institutional care. Some have had overwhelming losses of attachment figures. Some came into the world with organic problems that interfered with their ability to form attachments.

Attachment therapy is an evolving, dynamic, heterogeneous set of interventions whose overarching goal is the promotion of healthy attachment behaviors in families.

### Implications of Attachment Theory

The attachment system as identified by Bowlby (1969) served as a biologically programmed behavioral control system that operated to motivate infant behavior. Attachment behaviors included signaling behaviors (such as crying, calling and searching for the caregiver) that are designed to promote proximity to the caregiver to ensure survival. "The attachment system has an external goal of motivating the infant to seek proximity to the attachment figure and an internal goal of motivating the infant to seek felt security" (Zeanah, Mammen, Lieberman, 1993, p. 333). Times of stress or distress activate the attachment system and the child then uses the attachment figure as a "safe haven" for comfort and protection (Bretherton, 1980). Children develop different attachment patterns (secure, avoidant, resistant, and disorganized) based primarily on early experiences of caregiving. The type of attachment pattern the child develops will dictate the strategies the child then employs when distressed.

Attachment disorders are not synonymous with individual differences in patterns of attachment as measured by the Strange Situation Procedure, but instead represent profound and pervasive disturbances in a child's feelings of safety and security (Zeanah, Mammen, and Lieberman, 1993). These children do not seek comfort or engage in reciprocal emotional interactions with caregivers. Their response is typically the result of the either failing to develop an adequate attachment relationship or subsequently losing the attachment figure. When a child's display of attachment behaviors then fails to secure or regain contact and assistance from the attachment figure, the child is forced to "marshal defensive strategies that exclude this painful information from consciousness" (Solomon and George, 1999, p. 6). These defensive processes can include deactivation and disconnection of both affect and cognitions related to attachment experiences. "The degree of exclusion is likely associated with the intensity and persistence of the child's experience of the parent as able versus failing to provide protection and care" (Solomon and George, 1999, p. 26).

Children who have experienced profound early deprivation and/or maltreatment within the context of the primary caregiving relationship, often exhibit a significantly disorganized attachment system. These children's behavior evidences extremes of either "(1) active suppression or "blocking" of attachment behavior, representation, and related affects...(2) out-of-context and out-of-control attachment behavior, representation and affect; or (3) the alternation of these two states" (Solomon and George, 1999, p. 7). Their coping strategies may further include other barriers to connection. First, they often operate by a strategy referred to as "compulsive self reliance" (Bowlby, 1973), meaning that they fundamentally do not perceive others as a source of help, nurturance, or beneficence. Second, their impaired capacity for empathy may result in seeing others as mere things to be manipulated (Weil, 1992).

Bowlby (1969, 1973) described the young child's construction of internal working models as states of mind that represent the child's perceptions of self, others, and the world. For the young child, the primary variable in the construction of the model is the perception of the caregiver's accessibility when the child experiences a need. The internal working model is based on perceptions of 1) whether the caregiver is judged responsive, and 2) whether the self is judged worthy of such response (Bowlby, 1973, p. 204). This model is based on the child's experiences with the caregiver. Once formed, by about age 3, these expectations tend to

**persist as largely unconscious perceptions and remain relatively unchanged throughout life—unless directly identified, resolved, and revised.**

**Early attachment related trauma can have the most devastating effects on the developing child because of the often lasting effects on the child’s developing capacity for emotional and self – regulation (van der Kolk, Pelcovitz, Roth, and Mandel, 1996). However, advances in neuroscience and attachment research provide reason for hope. The expanding body of research now conceptualizes attachment as an “...ongoing process that becomes organized and reorganized at each stage of development in keeping with new maturational and experiential opportunities” (Greenspan and Lieberman, 1988, p. 415). Moreover, advances in neuroscience are powerfully demonstrating that “human connections create neuronal connections” (Siegel, 1999), such that relationships are critical in organizing and reorganizing the child’s developing brain. “Attachment relationships may serve to create the central foundation from which the mind develops” (Siegel, 1999, p. 68). Thus, attachment theory is increasingly viewed as a regulatory theory (Schore, 2001), with critical implications for both emotional- and self-regulation capacities throughout life.**

**The process of healing attachment disorders appears to involve several critical components. Different approaches to attachment therapy may conceptualize and/or prioritize these steps in different ways. However, there seems to be a growing consensus among attachment clinicians that these represent fundamental components of the therapeutic process. One involves the revision of the distorted internal working models and chaotic narratives (Osofsky, 1993). The second involves resolution of the child’s chronic patterns of avoidance of emotional and physical closeness. This is evident when the child can accept both verbal and nonverbal components of such closeness. For example, the child becomes more comfortable with nurturing touch. Touch is important because of its effects in activating brain systems involved in the regulation of stress responses (Panksepp, 2001). Additionally, the child becomes more comfortable with eye contact for closeness, as this facilitates synchronized face-to-face communication to support the kind of resonance necessary for attunement and arousal regulation (Schore, 2001). The third involves utilizing the improved attachment relationship as the support for enhanced self regulation across all domains (e.g., affect, cognition, behavior).**

### **Implications from Research on the Neurobiology of Trauma**

**Human beings have multiple memory systems including both explicit and implicit forms (Tulving, 1985). Explicit memory systems involve conscious learning that the individual can recall and discuss. Explicit memory includes both semantic (factual) and episodic (autobiographical) memories. Explicit memory systems, dependent on the hippocampus, do not begin to mature until the 3rd year of life (Perner and Ruffman, 1995).**

**Implicit memory systems involve more unconscious patterns of “procedural learning” that include emotional responses, behavioral patterns, skill sets, and mental models. Implicit memory systems, which depend on subcortical parts of the brain including the amygdala, are functional from birth (LeDoux, 1996). Experiences of attunement or misattunement are stored as implicit memories and become the mental models of attachment (Siegel, 1999).**

**Therefore, more traditional talk therapies, which elicit more explicit memories, may not be able to fully access a child’s model of attachment. Further, a young child’s explicit memory of early trauma may also be limited. However, the implicit memory systems may store a number of sensory-motor memories related to the both trauma and attachment.**

**When the parent is the source of a child’s fear, as in cases of maltreatment or “relational trauma” (Schore, 2001), the child cannot utilize the parent as a source of soothing or**

comforting. Thus the child becomes overwhelmed by both the fearful behavior of the parent and the child's perceived lack of security in response to the fear. This overwhelming experience of fear is inherently disorganizing for the young child (Main and Hesse, 1990). These patterns of affective misattunement may also become ingrained in implicit memory and alter the developing structure of the nervous system, leaving the child vulnerable to heightened physiological reactivity (Amini, Lewis, and Lannon, 1996).

When extreme stress is prolonged or chronic, there are biochemical changes in the brain that have effects on behavioral and emotional responses (Cozolino, 2002). Research has demonstrated dysregulated fear is often a consequence of experiences of prolonged fear absent resolution (LeDoux, 1996). Dysregulated fear can generate the aggressive and controlling behaviors evident in disorganized attachment and attachment disorders (Solomon and George, 1999). Effective management of fear reactions has long been the focus of the intervention known as exposure and desensitization (to be addressed in a section below).

Attachment-related trauma, occurring early in a child's life, can have very specific effects on the child's development and subsequent functioning. When a child experiences early, preverbal trauma, the child is deprived of the ability to use language to organize the experience at a conscious level or integrate necessary neural structures (Siegel, 1999). This has several important implications: First, the child is left with the automatic, unconscious conditioned fear reactions (LeDoux, 1993), whose origins lack a sense of time or context. Second, the effects of trauma interfere with cortical systems of integration of memory into coherent and conscious narrative (Siegel, 1996; Main, 1995, Fonagy, 1996).

However, a carefully guided, well-regulated attachment relationship can help revise these emotional structures. This is the goal of attachment-focused therapy. Indeed, advances in neuroscience are showing that successful therapeutic techniques can help recognize and alter non-integrated or dysregulated neural networks, thereby promoting better psychological functioning (Cozolino, 2002).

### Implications from Trauma Therapy

Children with histories of significant attachment-related trauma struggle with the dual aspects of this unique trauma. They suffered both the maltreatment itself and, often more significantly, the loss of the caregiver as a "secure base" (Ainsworth, 1982; Bowlby, 1988). The abuse or neglect may evoke fear or even terror, as well as physical distress or pain in the child. Second, the abuse or neglect precludes or disrupts the development of the secure attachment necessary for the development of the capacity to modulate arousal (van der Kolk and Fisler, 1994). The regulation of arousal and emotion is increasingly seen as a critical developmental process with far-reaching implications on mental health (Schoore, 2001a).

"Recovery can take place only within the context of relationships; it cannot occur in isolation. In renewed connections with other people, the survivor recreates the psychological faculties that were damaged and deformed by the traumatic experience" (Herman, 1992). For children, the potent crucible for healing is the parent-child relationship, not the therapeutic relationship with a therapist. In attachment therapy, the therapist works as a catalyst for and facilitator of healthy attachment between the child and parent.

In therapy for trauma related experiences, "there is general consensus that the cornerstone of treatment involves helping the individual re-experience the trauma and its meaning in affectively tolerable doses in the context of a safe environment" (Pynoos, 1990). The process of helping children re-experience the trauma depends on the child's level of functioning and accessibility to treatment.

Traumatized children with less severe degrees of such exclusion can and do respond to more traditional forms of psychotherapy in which they are gradually able to access and accept the support of another. But what of the child who continues to actively (even aggressively) resist all efforts (both therapeutic and parental) of comfort and nurture, and whose behavior presents continual threat of harm to self or others? It is these children who most need therapeutic intervention, yet steadfastly resist. The result is that these children typically end up on escalating medication regimens that provide chemical restraint and/or in institutional settings for containment/restraint of their behavior. In these cases, there is frequently little or no resolution of the underlying cause of the behavior, resulting in the often dangerous escalation of dangerous behaviors to self and/or others.

Attachment therapy seeks to provide an alternative approach where possible and prudent. Attachment therapy attempts to identify and resolve the underlying cause of the behavior, when the etiology is viewed as emanating from the early caregiving experiences. This resolution is dependent upon the dual process of identifying and reworking early maladaptive beliefs while providing a context of behavioral practice that involves the new caregiver. For children who experienced early relational trauma from profound neglect or maltreatment, the context of an emotionally intimate relationship becomes the critical crucible for healing. Yet, for these children, physical and emotional proximity are often themselves triggers for past traumatic memories. Recognizing this process, the attachment therapist purposefully utilizes positions and techniques that create emotional and physical proximity. The goal is to achieve systematic desensitization of the cues that elicit the child's defensive responses, so that the child can begin to experience a sense of safety in the present. But this exposure must be done in a manner that provides "affectively tolerable doses in the context of a safe environment" (Pynoos, 1990). Attachment therapy seeks to provide exposure in manageable doses to ensure that the conditioned emotional responses do not overwhelm the child's coping. This requires that the child is educated and prepared about the process; that the child and parent together explicitly contract to work on painful material; and that safeguards are in place to ensure the child's safety in the process. These safeguards must begin with a thorough clinical assessment to determine history, functioning, resources, and diagnosis, as well as to rule-out other comorbid conditions that may impede effective processing of such emotionally painful material (e.g., psychotic or pre-psychotic functioning; sensory integration difficulties; etc.). The safeguards then must include the continued reinforcement of present conditions of safety to actively counteract distorted cognitive beliefs emanating from the prior experiences of maltreatment—that is, to continually draw the boundary between the past and the present (e.g., provision of the experience of "disparity", Briere, 2002). Another critical safeguard is the active encouragement and process of contracting and recontracting, throughout the therapy as means of identifying, addressing, and remaining sensitive to the defenses that arise in the process. Other safeguards are discussed in the Professional Practice Manual of ATTACH (2002).

Briere (2002) has offered a comprehensive model for trauma resolution for working with adults who experienced severe childhood maltreatment. His integrated model is informative for attachment therapy for children who are survivors of such maltreatment. This model indicates the importance of the therapist's attention to balancing exploration of traumatic material with consolidation of the client's coping resources; active management of the client's level of activation; assessment and development of the client's skills for coping; and the provision of safety and support before more direct work on traumatic memories is attempted. The direct work on trauma is accomplished through a combined process of gradual exposure to traumatic material; activation of conditioned emotional responses; active disconfirmation of fear by the provision of tangible safety (e.g., providing "disparity"); followed by emotional and cognitive processing. The goal is to help the client develop a coherent narrative to both make

sense of what happened and feel an increased sense of control, so the earlier defenses of avoidance and dissociation are no longer necessary.

### **Implications from Developments in Psychodynamic Therapies**

Children with significant disorders of attachment have often failed to benefit from more traditional child therapy techniques. Often their early experiences of profound maltreatment affected their personality development in ways that precluded their ability to form and utilize a therapeutic relationship as an agent of change. What has evolved over 30 some years of attachment-focused treatment parallels evolutions within the field of psychodynamic therapy. In psychodynamic therapy, there has been a gradual awareness that traditional forms of therapy, which require the client to form and utilize a strong working alliance with the therapist, are most effective with higher functioning clients. Clients whose basic character structure is organized around more primitive defenses and who lack the ability to form the same kind of therapeutic working alliance need modified approaches to therapy (McWilliams, 1992).

Early psychoanalytic theory embraced the idea of abreaction developed by Breuer and Freud (1958). Abreaction referred to the process of reexperiencing the origins of early traumatic memories along with a discharge of uncovered emotions. Such breakthroughs of defensive processes were considered to be therapeutic in resolving pathologic symptoms. Psychodynamic theories have primarily focused on “the pathogenic nature of repressed or disavowed affect” (Greenberg and Safran, 1989).

More traditional forms of psychoanalytic therapy shifted away from the use of abreaction and catharsis toward greater focus on interpretation and insight. Current theory has questioned the necessity of abreaction for resolution of trauma. One area in which catharsis has been especially criticized is in the discharge of the emotion of anger. Research in social psychology has shown that there is little benefit from expression of anger; indeed, in such cases there is often a concomitant increase in aggression (Lewis and Bucher, 1992). However, other researchers have challenged these findings when considering clinical implications of catharsis (Scheff, 1979; Pierce, Nichols, and DuBrin, 1983; Kosmicki and Glickauf-Hughes, 1997). For example, in clinical contexts, catharsis can be helpful, if it meets the following criteria: it is handled in a safe, therapeutic manner; is an active process; and involves some form of cognitive processing.

There is ongoing debate about the usefulness of abreaction in clinical work. However, there is some level of agreement that a distinction needs to be made between abreaction that facilitates integration versus disintegration (Rothschild,2000). Abreaction that results in disintegration occurs when the level of arousal overwhelms the resources for coping, so that retraumatization and decompensation follow. Conversely, abreaction that promotes integration is carefully modulated to the individual’s resources and, moreover, facilitates emotional expression necessary for reprocessing traumatic material. The benefit of this latter form of abreaction is accepted by many in the trauma field. Indeed, “repeated emotional release during nondissociated exposure to painful memories is likely to pair the traumatic stimuli to the relatively positive internal states associated with emotional release” (Briere, 2002, p. 196).

Attachment therapy seeks to provide a safe container for emotional expression. For children with histories of cumulative relational trauma, their chronic reliance on strategies of avoidance and disconnection in order to survive extreme distress has resulted in a lack of a capacity to regulate their emotional experience. First, sensitive attunement is used to help the child begin to identify his/her emotional experience. The safety provided by this sensitive attunement

facilitates the child's experience and expression of emotion, so there is less need to rely on the earlier avoidant strategies. Part of the safety is that the child is not left alone in overwhelming states of negative emotion. Instead, a corrective experience of "interactive repair" is provided (Tronick, 1989). Interactive repair occurs when the caregiver actively helps the child transition back to a positive affective state. This teaches the child that negative emotions can be tolerated and survived. When the caregiver's attempt at nurturance and safe containment activates the child's conditioned fear response, the caregiver actively facilitates the child's transition to a positive affective state through soothing, reassurance, and encouragement. This "interactive repair" provides a potent experience of "disparity" (Briere, 2002) so that the child can begin to experience the primary relationship as one of safety and emotional assistance. "Disparity is not just the absence of danger, however—in the best circumstances, it is the presence of positive phenomena that are the antithetic to danger" (Briere, 2002, p. 195).

The release of negative emotions is only the beginning of emotional expressivity sought in attachment therapy. Attachment is promoted when the caregiver and child can develop a reciprocal capacity for resonating pleasure in their interaction (Demos, 1984). Attachment therapy often seeks to provide concrete experiences of nurturance that allow regressive dependency needs to be met by a sensitive caregiver in the present. In this way, the "traumatically thwarted infantile needs are therapeutically remobilized and delivered into the present" (Stark, 1994). This provides yet another confirmation for the child that his/her needs can be met within the context of this new (or rehabilitated) relationship with the caregiver.

In order for emotional expression to be effective in therapy, it is essential that therapists create a strong therapeutic alliance with the client. This helps promote the client's sense of feeling accepted, safe, and supported, so that exploration is possible (Greenberg and Safran, 1989).

### **Implications from Developments in Cognitive-Behavioral Approaches to Desensitization**

Developments within the field of cognitive-behavioral therapy, specifically as relate to exposure and desensitization, offer another important parallel to the evolution of techniques used within the field of attachment therapy. Cognitive-behavioral approaches to treatment "are a rational amalgam of diverse yet interrelated strategies for providing new learning experiences that involve enactive procedures and a cognitive analysis" (Kendall and Braswell, 1993, p. 1). Such treatment seeks to create opportunities to behaviorally practice solutions within a framework of identifying and addressing one's maladaptive cognitive processes.

Exposure is a cognitive-behavioral intervention that is used to increase a client's level of arousal when the client's avoidance strategies have become maladaptive. "Arousal can be created either by confronting (the client) with those aspects of experience, behavior, and sensation that are being avoided or preventing the exercise of usual coping strategies...Exposure to avoided experience necessitates that (the client) reorganize conceptual systems and respond differently" (Beutler and Clarkin, 1990, p. 273). For the fear response to be changed, a specific sequence of intervention must occur. The fear memory must be activated and then coupled with information that contradicts or refutes it so that a new memory can be formed (Foa, Steketee, and Rothbaum, 1998). Successful processing or integrating of the new information is necessary for successful recovery.

For conditioned emotional responses to traumatic memories to be extinguished, they must be challenged by a new experience that provides true disparity (Briere, 2002). The most powerful context of disparity for a traumatized child occurs when those limiting, distorted beliefs of the

negative internal working model can be sensitively challenged in an environment that provides demonstrable attunement and protection by a committed, compassionate caregiver in the face of the child's fears, rage, and self-loathing.

However, since extreme distress impedes the process of maintaining attention and may increase defensive responses, the level of arousal must be managed effectively. That is why exposure therapy utilizes strategies such as attention to somatic sensations, focused breathing, and cognitive reprocessing, which are essential components to effective management of exposure.

All models of psychotherapy are "devoted to managing the level of patient arousal or distress to keep those experiences within a range that is conducive to effective work" (Arkowitz and Hannah, 1991). If the arousal level is optimal, it will facilitate disconfirmation of distorted beliefs, cognitive change, and hopefully, even self-observation. When there is "too little arousal to maintain productive levels of motivation...the induction of arousal may be necessary in order to effectively promote change" (Beutler and Clarkin, 1990, p. 274). The therapist must ascertain "what is avoided" and "how it is avoided". If the level of arousal is too great, the child can be overwhelmed with negative affect. The result can be the reinforcement of the need for avoidance and dissociation or further fragmentation and disorganization. It is the therapist's responsibility to balance the demands for safety and processing.

The technique of exposure has long been used in cognitive-behavioral approaches to trauma work. Exposure is the activation of fearful arousal, coupled with active fear reduction techniques. The goal was to promote the ability to stay calm even when confronted with anxiety-provoking cues. The most accepted theory of the mechanism for systematic desensitization is counter-conditioning (Wolpe, 1958). In counter-conditioning, the individual is taught a competing response called reciprocal inhibition since the new response inhibits other problem states such as fear.

Early forms of exposure therapy for desensitization were very confrontive and distressing. Exposure therapy initially focused on helping the client elicit and then habituate to high levels of fearful arousal. The objective of this process was to help the client challenge limiting beliefs that he/she could not cope with the frightening stimulus. Contemporary forms of exposure therapy now encompass more of a mastery approach. Indeed, guided mastery has been shown to produce more effective results than stimulus exposure treatment (Williams, 1990). These approaches use the "safety-signal perspective" (Rachman, 1980) to deemphasize the level of anxiety aroused during exposure, while actively supporting the client's sense of mastery. Emphasis is now on acquisition of a sense of control over perceived unpredictable and uncontrollable events, with a change in the escape or avoidance behavior.

Early forms of attachment therapy, like early forms of desensitization, were more confrontational and distressing. But like exposure therapy, attachment therapy continues to evolve. Attachment therapy relates to the process of desensitization in several ways. The resolution of disordered attachment is dependent upon the dual process of identifying and reworking early maladaptive beliefs within a context of behavioral practice that involves the new (or newly rehabilitated ) caregiver. However, the special challenge is that the child with this kind of disorder typically manifests a high level of defensive exclusion of attachment-related behavior, representation, and affect. Traditional forms of talk therapy are unlikely to evoke and access these excluded components. Indeed, these children are often very fearful of and therefore avoid any cues that might evoke these components. In attachment disorders, the "what is avoided" is the physical and emotional closeness with a caregiver; the "how it is avoided" is through the processes of deactivation, disconnection, and aggression.

Therefore the use of touch and physical holding in attachment therapy is utilized to create a context that facilitates access to these defensively excluded components. First, physical closeness of the head in the parent's lap, coupled with encouraged eye contact, recreates a sense of dependency and vulnerability in the child. It is these feelings and the fears they induce that are often so heavily defended against in attachment disorders. But more importantly, the protective lap of the new (or newly rehabilitated) caregiver provides a physical experience of safety and comfort that can powerfully counter the potent sensori-motor memories of the early deprivation and maltreatment. Thus, safety is provided in a relational context that was originally associated with fear. Memories or representations of early experiences of attunement versus maltreatment are acquired in the preverbal, sensorimotor period and therefore are most resistant to change (Koback and Sceery, 1988). That is why verbal interventions alone are usually less effective with this type of early, preverbal traumatic memory.

The objective is to decondition the automatic fear reactions associated with emotional intimacy. This deconditioning helps facilitate the reintegration of emotional and behavioral experiences that were defended against in the processes of deactivation and disconnection of the attachment system. As this deconditioning occurs, the child is able to behaviorally practice reciprocal emotional interaction with the caregiver and accept nurturing care. This process occurs within the context of the relationship with the caregiver. The reciprocal inhibition is accomplished when the child can be physically and emotionally close with the parent (the former trigger for avoidance and dissociation), yet now experience a sense of safety and comfort.

It is not just talked about or imagined, as might occur in more traditional talk therapies. It is experienced and reinforced. Such in vivo desensitization has proven to be more effective than fantasy for several reasons (Watson and Tharp, 1972). First, the actual behavior change is important. Second, the imagined scenes are not as complete and realistic. Third, the objective is not just a decrease in fear, but more importantly, an increase in effective coping.

Such deconditioning presents special challenges in working with children who have disorders of attachment. Disorders of attachment more typically derive from experiences of cumulative, severe trauma. Children manage this type of trauma through defensive strategies of numbing and dissociation (Terr, 1991). This leads to the above discussed deactivation and disconnection of the attachment system when the trauma occurs within the caregiving relationship. Further, severe trauma before the age of 4 results in limited cognitive recall and an inability to relate current symptoms to the early trauma (Perry, 2000). Thus, the child, due to the very nature of the disorder, is unable to competently give informed consent. This is not an unusual occurrence with children given their limited cognitive abilities. Parents typically act on the child's behalf to give consent. The concern here is that the intrusive techniques not be re-traumatizing for the child. In order to best accomplish this, there needs to be extensive preparation and contracting involving the child and parents. Contracting with the child involves (1) careful identification of the implications of the child's behaviors without treatment; (2) the current caregiver's commitment to the child; and (3) the commitment to safety for all through the process. Parents give consent for intrusive medical interventions to save the child's life. The implications for treating attachment disorders are the emotional equivalent of saving a child's life. The developmental trajectory of untreated attachment disorders can be severe personality disorders with significant functional impairment perpetuating the cycle of maltreatment with their children, spend years of their life incarcerated, and/or failing to be safe and contributing members of society (APA, 1994).

Exposure can be direct (e.g., conscious self access to explicit memories) or indirect (e.g., implicit, meaning that the traumatic memory is activated within the relationship itself) (Briere,

2002). Where trauma therapy would focus on direct exposure to the traumatic memory, attachment therapy works initially utilizing indirect exposure. That is, the relationship itself activates the conditioned emotional response. Until the triggers associated with the context of the relationship itself are identified and resolved, the child does not have access to a haven of safety so needed for trauma work. Since attachment is formed in implicit memory systems (Tulving, 1985) as preverbal, sensori-motor templates of interaction (Koback and Sceery, 1988), conditioned emotional reactions to attachment are more unconscious and therefore difficult to change through conscious, verbal interventions.

Another issue concerns the nature of the therapeutic relationship itself. In more traditional forms of therapy, “the therapist must ensure that the strength of the relationship is always sufficient to help the patient through the resistance and arousal that characteristically accompany directive and intrusive interventions” (Beutler and Clarkin, 1990). The fundamental problem in disorders of attachment is the child’s profound inability to form that kind of trusting relationship. Indeed, these children typically have defeated numerous caregivers and therapists prior to getting to the point of referral to a therapist who specializes in treatment of attachment disorders. Therefore, the diagnosis of an attachment disorder presumes the motivational force behind the child’s extreme issues of control is to maintain the level of deactivation and disconnection. The child’s need for control generates a profound need to resist the therapist’s (or parent’s) influence. It is in clinical situations such as this that defiance-based paradoxical interventions have their most desirable effects among clients who exhibit such high levels of interpersonal resistance (Shoham-Salomon, Avner, and Zevlodever, 1988; Beutler and Clarkin, 1991). Such defiance-based paradoxical interventions may include prescribing the symptom, as well as magnifying or exaggerating the symptom.

Both of these processes can be present in attachment therapy utilizing physical holding. For example, the child’s defensive strategies of deactivation, disconnection, and aggression may be explicitly identified as a response to the caregiver seeking emotional connection with the child. The roots of this defensive strategy are also explicitly identified (e.g., as survival strategies for past experience) but challenged against current reality. When the caregiver then makes a nurturing overture toward the child (e.g., verbally expressing caring about the child, encouraging eye contact, touching the child, etc.), the child’s defensive strategies are then met with reassurance and calm. The caregiver perseveres to prove that the defensive strategies that have defeated others in the past will no longer work to keep this caregiver away. If the child escalates into strategies of aggression, the child can be safely contained so that he/she is not able to hurt or drive others away. Such containment is coupled with active reassurance, protection and guidance to disconfirm old, distorted beliefs. Nurturing containment through the use of physical holding, coupled with verbal reassurance and explanations, is recognized as a critical function of healthy parenting, especially for young (or developmentally young) children (Brazelton, 1992).

In spite of the effectiveness of such defiance-based paradoxical interventions, their use requires special safety precautions. Most significantly, “the therapist should be aware of the potential for abuse in these procedures” (Beutler and Clarkin, 1991, p. 277). Most importantly, the therapist must be able to congruently demonstrate positive feelings toward the child throughout the intervention (e.g., signs of annoyance or irritation are counter-therapeutic and increase the risk for abuse). Other safety precautions include adequate training and preparation of all participants as well as the guidelines outlined in the Practice Manual for ATTACH. Finally, the therapist must be able to provide a developmentally appropriate rationale for the child. This needs to integrate the behavioral practice component with the process of identifying and resolving the maladaptive cognitive processes inherent in the formation and maintenance of the defensive strategies and distorted beliefs that underlie disorders of attachment.

## Summary

Attachment therapy attempts to provide a corrective emotional experience of empathic attunement, coupled with specifically enriched experiences (e.g., resonating positive emotional exchanges; provision of tangible nurturing; sensori-motor experiences of safety and comfort with the parent, to challenge the early experiences of maltreatment or abandonment that contributed to the distorted internal working model; assistance in developing a coherent narrative, etc.). In this way, attachment therapy is viewed as a developmentally focused set of interventions aimed at remediating the developmental effects of early trauma and/or deprivation. These experiences are believed to “enhance the growth of neurons and the integration of neural networks” (Cozolino, 2002) necessary to resolve early trauma, revise relational schemas, and remediate developmental deficits. Cozolino further states that growth and integration in this process are enhanced by:

1. The establishment of a safe and trusting relationship.
2. Gaining new information and experiences across the domains of cognition, emotion, sensation, and behavior.
3. The simultaneous or alternating activation of neural networks that are inadequately integrated or dissociated.
4. Moderate levels of stress or emotional arousal alternating with periods of calm and safety (to develop skills in affect regulation).
5. The integration of conceptual knowledge with emotional and bodily experience through narratives that are co-constructed with the therapist (and parent).
6. Developing a method of processing and organizing new experiences so as to continue ongoing growth and integration outside of therapy.

## References

- Ainsworth, M.D. (1982). Attachment retrospective and prospective. In C.M. Parkes and J. Stevenson-Hinde (Eds.). *The Place of Attachment in Human Behavior* (pp. 3 – 30). London: Tavistock.
- Alexander, F.G., and French, T.M. (1946). *Psychoanalytic Therapy: Principles and Applications*. N.Y.: Ronald Press.
- American Psychiatric Association (1980). *Diagnostic and Statistical Manual-Third Edition*. Washington, D.C.: American Psychiatric Press.
- American Psychiatric Association (1994). *Diagnostic and Statistical Manual-Fourth Edition*. Washington, D.C.: American Psychiatric Press.
- Amini, F., Lewis, T. and Lannon, R., Louie, A., Baumbacher, G., McGennis, T., and Schiff, E. (1996). Affect, attachment, memory: Contributions toward psychobiologic integration. *Psychiatry*, 59, 213 – 237.
- Arkowitz, H. and Hannah, M.T. (1991). Cognitive, behavioral, and psychodynamic therapies: Converging or diverging pathways to change? In A. Freeman, H. Arkowitz, L. E. Beutler, and K. Simon (Eds.), *Comprehensive Handbook of Cognitive Therapy*. New York: Plenum.
- ATTACH (2002). *Professional Practice Manual*. Columbia, S.C.: Association for Treatment and Training in the Attachment of Children.
- Bender, L. and Yarnell, H. (1941). An observation nursery: a study of 250 children in the psychiatric division of Bellvue Hospital. *American Journal of Psychiatry*, 97, 1158 – 1174.
- Beutler, L.E. and Clarkin, J.F. (1990). *Systematic Treatment Selection: Toward Targeted Therapeutic Interventions*. New York: Bruner Mazel.
- Bowlby, J. (1969/1982). *Attachment and loss: Vol. I. Attachment*. New York: Basic Books.
- Bowlby, J. (1973). *Attachment and Loss: Vol. II: Separation and Loss*. New York: Basic Books.
- Bowlby, J. (1988). *A Secure Base*. New York: Basic Books.
- Brazelton, T.B. (1992). *Touchpoints: Your child's emotional and behavioral development*. New York: Perseus Publishing.
- Bretherton, I. (1980). Young children and stressful situations. In G.V. Coelho and P. Ahmed (Eds.) *Uprooting and development*. New York: Plenum.
- Briere, J. (2002). Treating adult survivors of severe childhood abuse and neglect: Further developments of an integrative model. In J. E.B. Myers, L. Berliner, J. Briere, C.T. Hendrix, C. Jenny, and T. A. Reid (Eds.). *The APSAC Handbook on Child Maltreatment, 2nd Edition*. Thousand Oaks, CA: Sage Publications.
- Cline, F.W. (1992). *Understanding and treating the severely disturbed child*. Evergreen, CO: Evergreen Consultants in Human Behavior, EC publications.

- Cozolino, L. (2002). *The Neuroscience of Psychotherapy: Building and Rebuilding the Human Brain*. New York: W. W. Norton.
- Dozier, M. (2000). Motivation for caregiving from an ethological perspective. *Psychological Inquiry*, 11, 97 – 100.
- Dozier, M., Stovall, K.C., Abus, K. (1999). A transactional intervention for foster infants' caregivers. In D. Chicchetti and S.L. Toth (Eds.), *Rochester Symposium on Developmental Psychopathology: Developmental Approaches to Prevention and Intervention*, pp. 195 – 219. Rochester, NY: University of Rochester Press.
- Emde, R.N., Biringen, A., Clyman, R.B., Oppenheim, D. (1991). The moral self in infancy: Affective core and procedural knowledge. *Developmental Review*, 11, 251 – 270.
- Erickson, M.F., Korfmacher, J., and Egeland, B. (1992). Attachment past and present: Implications for therapeutic interventions with mother-infant dyads. *Development and Psychopathology*, 4 (4), 495 – 507.
- Fahlberg, V. (1991). *A Child's Journey Through Placement*. Indianapolis, IN: Perspectives Press.
- Feshbach, N.D. (1987). Parental empathy and child adjustment/maladjustment. In N. Eisenberg and J. Strayer (Eds.), *Empathy and Its Development*. New York: Cambridge University Press.
- Field, T. (1985). Attachment as psychobiologic attunement. In M. Reite and T. Field (Eds.), *The Psychobiology of Attachment and Separation* (pp. 415 – 450). New York: Academic Press.
- Fonagy, P. (1996). The significance of development of metacognitive control over mental representations in parenting and infant development. *Journal of Clinical Psychoanalysis*, 5, 1, 67 – 86.
- Fonagy, P. Steele, M., Steele, H., Moran, G., and Higgitt, A. (1991). The capacity for understanding mental states: The reflective self in parent and child and its significance for security and attachment. *Infant Journal of Mental Health*, 13, 200 -217
- Foa, E.B., Steketee, G.S., and Rothbaum, B.O. (1989). Behavioral/cognitive conceptualizations of ptsd. *Behavior Therapy*, 20, 155 – 176.
- Freud, S. (1958). Remembering, repeating, and working-through. In J. Strachey (Ed. and Trans.). *The Standard Edition of the complete psychological works of Sigmund Freud* (Vol. 12, pp. 146 – 156). London: Hogarth Press. (Original published in 1914).
- Goldfarb, W. (1945). Psychological privation in infancy and subsequent stimulation. *American Journal of Orthopsychiatry*, 14, 247 – 255.
- Greenberg, L.S. and Safran, J.D. (1989). Emotion in Psychotherapy. *American Psychologist*, 44 (1), 19 – 29.
- Greenspan, S.I. and Lieberman, A.F. (1988). A clinical approach to attachment. In J. Belsky and T. Nezworski (Eds.). *Clinical Implications of Attachment* (pp. 387 – 424). Hillsdale, N.J.: Erlbaum.

Greenspan, S.I. and Wieder, S. (1993). Regulatory disorders. In Charles H. Zeanah, Jr. (Ed.), *Handbook of Infant Mental Health* (pp. 280 – 290). New York: Guilford.

Herman, J.L. (1992). *Trauma and Recovery*. New York: Basic Books.

Hughes, D.A. (1997). *Facilitating Developmental Attachment: The Road to Emotional Recovery and Behavioral Change with Foster and Adoptive Children*. Northvale, NJ: Aronson.

Isabella, R.A. and Belsky, J (1991). Interactional synchrony and the origins of infant-mother attachment. *Child Development*, 62, 373 – 384.

James, B. (1994). *Handbook for Treatment of Attachment-Trauma Problems in Children*. New York: Lexington.

Keck, G.C. and Kupecky, R.M. (1995). *Adopting the Hurt Child*. Colorado Springs, CO: Pineon.

Kendall, P.C. and Brawell, L. (1993). *Cognitive-Behavioral Therapy for Impulsive Children*. New York: Guilford.

Kobak, R.R. (1999). The emotional dynamics of disruptions in attachment relationships: Implications for theory, research, and clinical intervention. In J. Cassidy and P.R. Shaver (Eds.), *Handbook of Attachment: Theory, Research and Clinical Applications* (pp. 21- 43). New York: Guilford.

Kobak, R.R. and Sceery, A. (1988). Attachment in late adolescence: working models, affect regulation, and representation of self and others. *Child Development*, 59, 135 – 146.

Kohut, H. (1978). *The Search for the Self*, Vol. 1. New York: International University Press.

Kosmicki, F.X. and Glickauf-Hughes, C (1997). Catharsis in psychotherapy. *Psychotherapy*, 34, 2, 154-159.

LeDoux, J. (1996). *The Emotional Brain*. New York: Simon and Schuster.

Lieberman, A.F. (1992). Infant-parent psychotherapy with toddlers. *Development and Psychopathology*, 4, 559 –574.

Lieberman, A.F. and Pawl, J.H. (1990). Disorders of attachment and secure base behavior in the second year of life: Conceptual issues and clinical interventions (pp. 375 – 398). In M.T. Greenberg, D. Cicchetti, and E.M. Cummings (Eds.), *Attachment in the Preschool Years*. Chicago: University of Chicago Press.

Levy, D. (1937). Primary affect hunger. *American Journal of Psychiatry*, 94, 643 –652.

Main, M. (1995). Discourse, prediction, and recent studies in attachment: Implications for psychoanalysis. In T. Shapiro and R.N. Emde (Eds.). *Research in Psychoanalysis* (pp. 209 – 244). Madison, CT: International University Press.

Main, M. (1991). Metacognitive knowledge, metacognitive monitoring, and singular (coherent) versus multiple (incoherent) models of attachment. In C.M Parkes, J. Stevenson-Hinde, and P. Marris (Eds.), *Attachment Across the Life Cycle*. New York: Tavistock/Routledge.

Main, M. and Hesse, E. (1990). Parents' unresolved traumatic experiences are related to infant disorganized status: Is frightened and/or frightening parental behavior the linking mechanism? In M.T. Greenberg, D. Cicchetti, and E.M. Cummings (Eds.), *Attachment in the Preschool Years: Theory, Research, and Intervention.*, (pp. 161- 182). Chicago, IL: University of Chicago Press.

McWilliams, N. (1994). *Psychoanalytic Diagnosis: Understanding Personality Structure in the Clinical Process*. New York: Guilford.

Osofsky, J.D. (1993). Applied psychoanalysis: How research with infants and adolescents at high psychosocial risk informs psychoanalysis. *Journal of the American Psychoanalytic Association*, 41, 193 – 207.

Panksepp, J. (2001). The long-term psychobiological consequences of infant emotions. *Infant Mental Health Journal*, 22 (1-2), 132- 173.

Perner, J. and Ruffman, T. (1995). Episodic memory and autothetic consciousness: Developmental evidence and a theory of childhood amnesia. *Journal of Experimental Child Psychology*, 59, 516 – 548.

Perry, B. (2000)

Pierce, R.A., Nichols, M.P., and DuBrin, J.R. (1983). *Emotional Expression in Psychotherapy*. New York: Gardner Press.

Pynoos, R.S. (1990). Post-traumatic stress disorder in children and adolescents. In B. Garfinkel, G. Carlson, and E. Weller (Eds.) *Psychiatric disorders in children and adolescents* (pp. 48 – 63). Philadelphia: W. B. Saunders.

Rachman, S. (1984). Agoraphobia: safety signal perspective. *Behavioral Research and Therapy*, 22, 59 – 70.

Richters, , M.M. and Volkmar, F.R. (1994). Reactive attachment disorder of infancy and early childhood. *Journal of the American Academy of Child and Adolescent Psychiatry*, 33,3, 328 – 332.

Rothschild, B. (2000). *The Body Remembers: The Psychophysiology of Trauma and Trauma Treatment*. New York: W. W. Norton.

Sameroff, A.J. & Emde, R.N. (Eds.) (1989). *Relationship Disturbances in Early Childhood: A Developmental Approach*. New York : Basic Books.

Scheff, T.J. (1979). *Catharsis in healing, ritual, and drama*. Berkley: U of Ca Press.

Shoham-Salomon, V., Avner, R., and Zevlodever, R. (1988). "You are changed if you do and changed if you don't: Cognitive mechanisms underlying the operation of therapeutic paradoxes". A paper presented at the Society for Psychotherapy Research, Santa Fe, New Mexico. Cited in Beutler and Clarkin (1991).

Schore, A.N. (2001). Effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, 22 (1-2), 7 – 67.

- Schore, A.N. (2001). Early relational trauma on right brain development. *Infant Mental Health Journal*, 22, (1-2), 201 – 269.
- Siegel, D.J. (1999). *The Developing Mind: Toward a Neurobiology of Interpersonal Experience*. New York: Guilford.
- Siegel, D.J. (1996). Cognition, memory, and dissociation. *Child and Adolescent Clinics of North America*, 5 (2), 509 – 536.
- Solomon, J. and George, C. (1999). The place of disorganization in attachment theory: Linking classic observations with contemporary findings (pp. 3 – 32). In J. Solomon and C. George (Eds.), *Attachment Disorganization*. New York: Guilford.
- Sroufe, L.A. (1977). Attachment as an organizational construct. *Child Development*, 48, 1184 – 1198.
- Sroufe, L.A. , Cooper, R.G., and DeHart, G.B. (1992). *Child Development: Its Nature and Course* (2nd Edition). New York: McGraw-Hill.
- Stark, M. (1994). *Working With Resistance*. Northvale, NJ: Jason Aronson.
- Stern, D.N. (1985). *The Interpersonal World of the Infant*. New York: Basic Books.
- Terr, L. (1991). Childhood traumas: an outline and overview. *American Journal of Psychiatry*, 148, 1, 10- 20.
- Tizard, B. and Hodges, J. (1978). The effect of early institutional rearing on the development of 8 year old children. *Journal of Child Psychology and Psychiatry*, 19, 2, 99 – 118.
- Trad, P.V. (1992). *Interventions with Infants and Parents*. New York : Wiley.
- Trevarthen, C. (2001). Intrinsic motives for companionship in understanding: Their origin, development, and significance for infant mental health. *Infant Journal of Mental Health*, (22), 1-2. 95 – 131.
- Tronick, E.Z. (1989). Emotions and emotional communication in infants. *American Psychologist*, 44, 112 – 119.
- Tulving, E. (1985). How many memory systems are there? *American Psychologist*, 40, 385 – 398.
- Van der Kolk, B.A. and Fisler, R.F. (1994). Childhood abuse and neglect and the loss of self-regulation. *Bulletin of the Menninger Clinic*, 58, 2, 145 – 168.
- Waldman, I.D., Lilienfield, S.O., and Lahey, B.B. (1995). Toward a construct validity of childhood disruptive behaviors. In T.H. Ollendick and R.J. Prinz, (Eds.), *Advances in Clinical Child Psychology*, 17, 323-363.
- Watson, D. and Tharp, R. (1972). *Self Directed Behavior*.
- Weil, J.L. (1992). *Early Deprivation of Empathic Care*. Madison, Ct.; International University Press.

**Williams, S.L. (1990). Guided mastery treatment for agoraphobia: Beyond stimulus exposure. Progress in Behavior Modification, 26, 89 – 121.**

**Zaslow, R.W. and Breger, L. (1969). A theory and treatment of autism. In L. Breger (Ed.), Clinical-cognitive psychology: Models and integration,. Englewood Cliffs, N.J.: Prentice-Hall.**

**Zeanah, C.H., Mammen, O.K., Lieberaman, A.F. (1993). Disorders of attachment (pp. 332- 349). In C.H. Zeanah, Jr. (Ed.), Handbook of Infant Mental Health. New York: Guilford.**