

Domestic Violence and Attachment Theory: Clinical Applications to Treatment with Perpetrators

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For the past thirty years, the treatment of choice for perpetrators of domestic violence has generally fallen into two intervention categories - cognitive-behavior therapy (e.g. Sonkin and Durphy, 1997; Sonkin, 2003; Dutton, 1995, 1998) and feminist based re-education (APA, 1996). Other models, such as family systems (Heyman and Schlee, 2003) and psychodynamic models (Cogan and Porcerelli, 2003) have not garnered much interest by treatment providers for a number of reasons. First, social activists have criticized these models as inherently either blaming the victim (as in the case of family systems interventions) or blaming the past (as in the case of psychodynamic approaches). Second, state laws that have been advocated by activists generally mandate the type of interventions providers must include in their programs, and these requirements usually are based on the feminist re-education model, such as that offered by the Domestic Abuse Intervention Project that has become to be known as the Duluth Model (Pense and Paymar, 1993). Third, many programs for perpetrators are either run by or supervised by local shelters that tend to advocate a particular approach to intervention, which is usually the Duluth Model or a hybrid of Duluth and the behavioral model. Although some writers are attempting to challenge these traditional ways of approaching perpetrator treatment (Dutton, 1994; Dutton and Sonkin, 2003; Rosenbaum and Leisring, 2003), domestic violence intervention has experienced little change over the past two decades, in that treatment for perpetrators is much the same as it was in the early 1980's.

The most unfortunate aspect of this state of affairs is that our clients are the ultimate losers when the profession is unwilling or unable to innovate, explore and create newer and more effective models of intervention. Another cause of this stagnancy is that the field has been prevented from growth due to the limitations of laws that have been enacted which dictate the allowable type of treatment models. Imagine living in a society where laws were used to dictate a type of medical intervention for cancer or heart disease. Every time a new drug or treatment approach was developed, either it couldn't be utilized or a new law would need to be rewritten. Well, that's the case in the domestic violence field. Many states, such as California, have essentially mandated the Duluth Model into the law, even though numerous evaluations of the Duluth model have found that program participation had no impact on recidivism (Davis, Taylor and Maxwell, 1998; Feder and Forde, 1999; Levesque, 1998; She, 1990; Shepard, 1987). This situation puts mental health professionals into a precarious position. On the one hand, they are required by domestic violence law to provide a particular form of perpetrator intervention (that may not be proven effective), and on the other hand, they are also mandated by state licensing laws to provide effective services that are consistent with the profession – not those defined by domestic violence activists. It is one thing to mandate intervention generally, it is another thing to define a specific form of intervention. Another unintentional outcome of the lack of change and

evolution in the field may be related to treatment outcome. Recent research suggests that the current intervention models employed today are only having a moderate effect on treatment outcome (Babcock, Green and Robie, 2004). Could this moderate effect be due in part to the lack of innovation in the field?

The purpose of the chapter is to present an argument for the expansion of our conceptualization of domestic violence from a primarily social/political perspective to a model that considers neurobiology, as well as developmental and social psychology. This chapter will primarily focus on male perpetrators, however, many of the principles presented here can be applied to women as well. Women perpetrators are a special population and may need different attention for several reasons. First, a significant percentage of women perpetrators are also concurrent victims of domestic violence (Leisring, Dowd and Rosenbaum, 2003) and therefore safety is a primary focus of treatment. Second, women perpetrator typology categories, though similar, are not exactly the same as male typology categories (Babcock, Miller, and Siard, 2003). Although there is some research on victims of domestic violence and attachment theory (Henderson, Bartholomew and Dutton, 1997; Morgan and Shaver, 1999), there is less research on the typology of women perpetrators than males. Therefore, some of the assumptions made about males in this chapter may not hold true for female perpetrators. Given these reasons, I will focus my attention on the male perpetrator, even at the risk of being accused of stereotyping.

I will begin with an overview of attachment theory as well as significant findings that are relevant to domestic violence. I will describe two methods of assessing attachment and how this innovative theory can be applied to clinical treatment. Since the 1990s, also known as the decade of the brain, the neurosciences have extensively expanded our understanding of the brain and its relevance to psychotherapy. Since attachment may be viewed as a form of affect regulation and domestic violence is one example of affect dysregulation, a discussion of the application of attachment theory to psychotherapy would not be complete without a discussion of the exciting new findings in the affective neurosciences. Lastly, I will discuss how clinicians can integrate both attachment theory and affective neuroscience findings into their work with perpetrators of violence.

Attachment Theory Overview

In his landmark trilogy, *Attachment and Loss* (1969, 1973, 1980), the British psychiatrist John Bowlby posited a theory of development that contradicted the prevailing psychoanalytic theories of the time and proved to be a revolutionary way of understanding the nature of the attachment bonds between infants and their caregivers. In his observations of infants separated from their mothers and fathers during hospitalizations, he saw the dire effects of separation distress on the emotional state of the child. Bowlby's departure from the traditional psychoanalytic theory at the time was considered heretical, and he was ostracized by his peers for many years to come. It wasn't until after his death in 1990 that the British analytic community issued a formal apology to his family (Bretherton, 1992).

According to the theory, attachment is governed by a number of important principles. First, alarm of any kind, stemming from an internal (such as physical pain) or an external source (such as a loss of contact with a caregiver), will activate what Bowlby called "the attachment

behavioral system.” Bowlby believed that the "attachment behavioral system" was one of four behavioral systems that are innate and evolutionarily function to assure survival of the species. The distress produced by the stimulus directs and motivates infant to seek out soothing physical contact with the attachment figure. Once activated, only physical attachment with the attachment figure will terminate the attachment behavioral system. The infant is like, as Cassidy (1999) describes, a heat-seeking missile, looking for an attachment figure (typically the parent) that is sufficiently near, available, and responsive. When this attempt for protection is met with success, the attachment system de-activates, the anxiety is reduced, the infant is soothed, and play and exploration can resume. When these needs are not met, the infant experiences extreme arousal and terror. When the system has been activated for a long time without soothing and termination, the system can then become suppressed. Bowlby reported observations he made of young children (15 –30 months) separated for the first time from their mothers. He witnessed a three phase behavioral display: protest, despair, and detachment. He concluded from these observations that the primary function of protest was to generate displays that would lead to the return of the absent parent. This expression of negative emotion may be viewed as an attempt to recapture the attachment figure that can soothe tension and anxiety at a developmental stage where the child cannot yet self soothe itself. Through this signaling the attachment figure told that she is wanted and/or needed. When the attachment figure is sufficiently unresponsive to the infant’s call for help, insecure patterns of attachment develop that may set the stage for problems in interpersonal functioning later in life (Ainsworth, Blehar, Waters, Wall, 1978).

Mary Ainsworth was the American psychologist who brought Bowlby's theory to the United States and developed a method of assessing infant attachment. In her landmark book, *Patterns of Attachment: A Psychological Study of the Strange Situation* (1978), she describes a currently widely used protocol, the strange situation, and the patterns of secure and insecure attachment. Originally three patterns were observed, secure, anxious avoidant, and anxious ambivalent, but later on a fourth category, disorganized was described. The "strange situation" is a laboratory procedure used to assess infant attachment status. The procedure consists of eight episodes of separation and reunion (Ainsworth, Blehar, Waters, and Wall, 1978). The infant's behavior upon the parent's return is the basis for classifying the infant into one of three attachment categories. The secure infants experienced distress at the separation and were unable to resume exploration and play. When the parent returned, the infant showed distress, but was able to quickly settle down and return to exploration. Another group of infants neither showed distress at separation or reunion. These infants were termed anxious-avoidant. Although they seemed unphased by the separation and reunion process, when physiological measures were administered, these infants were clearly in distress. After probably thousands of mini-interactions with that parent, the child learned that showing distress was not going to result in a positive response, so the infant quickly learned to manage their distress on their own. A third category of infants, were extremely distressed at separation and at reunion. However, these infants were not able to return to play and exploration, like the secure infants, when their parents tried to soothe them. They clung to their parents and often demonstrated anger and aggression. These infants were termed anxious-resistant. Again, after thousands of mini-interactions with that parent, the child learned that staying in close proximity with increase the possibility of getting soothing in times of distress. This strategy is at the expense of healthy exploration and play.

Originally researchers described three categories (secure, anxious-avoidant and anxious-resistant) and a final category termed “can not classify.” Main and Solomon (1986) looked more closely at these unclassifiable infants and found an interesting and consistent pattern that emerged. Some children were particularly ambivalent upon reunion with their attachment figure, both approaching and avoiding contact. Upon reunion some of these infants would walk toward their parent and then collapse on the floor. Others would go in circles and fall to the floor. Some would reach out while backing away. These infants appeared to demonstrate a collapse in behavioral and attentional strategies for managing attachment distress (Hesse and Main, 2000). They didn’t display an organized strategy for coping with attachment distress like the other categories (secure would cry and get soothed, avoidant would ignore the parent, resistant would cling), so these infants were termed, disorganized. Bowlby, in his book *Attachment and Loss*, (1969) described some children in their caregiver’s arms as “arching away angrily while simultaneously seeking proximity.” When researchers asked why these children were both seeking protection from their caregivers while at the same time pulling away, they discovered that a large percentage of these infants were experiencing abuse by their caregiver. In other words, the person who was supposed to be a haven of safety for the infant was also the source of fear. Main and Hesse (1990) wrote that these infants were experiencing “fear without solution.” Another subgroup of disorganized infants, however, were not experiencing abuse by their caregivers, which the researchers found to be a curious anomaly. It was discovered that these caregivers had experienced abuse by their parents, but that abuse was still unresolved. Upon close examination, it was discovered that when the infant was in need of protection, the caregiver became frightened (may turn away or make subtle frightening faces at the infant). It is believed that attachment disorganization occurs when a parent acts either frightening or frightened in response to the infant’s need for protection.

The rates of attachment patterns in both infants and adults are very consistent across cultures in non-clinical samples (Main, 1990, Waters and Cummings, 2000). This would make sense since attachment, from an ethological perspective, is biologically based and handed down by evolution to promote survival of the species. There has been criticism of Bowlby’s theory as being inherently biased toward western thinking (Rothbaum, Weisz, Pott, Miyake, and Morelli, 2000). About 60% of the population is securely attached and about 40% are insecurely attached. The rates of insecure patterns in the US samples are: 25% anxious-avoidant, 10% anxious-resistant and 5% disorganized. However, the rates of insecure patterns differs from culture to culture (van IJzendoorn and Sagi, 1999).

Adult Attachment

In the 1980s, the field of adult attachment began to evolve. This occurred for several reasons. First, many attachment labs were conducting research on the continuity of attachment status over time. Researchers were also becoming interested in the long-term effects of secure and insecure attachment on interpersonal functioning (Waters, Merrick, Treboux, Crowell, and Albersheim, 2000). As the research in child, adolescent and adult attachment evolved, new methods of assessing attachment status were needed. Mary Main and her colleagues (Main and Goldwyn, 1993) at the University of California, Berkeley developed the Adult Attachment Interview (AAI). The interview has been utilized in hundreds of studies world wide to assess adult attachment states of mind. The adult attachment literature utilizes somewhat different category

terminology. Each adult term corresponds to an infant term. - secure, dismissing (anxious-avoidant infants), preoccupied (anxious-resistant infants) and disorganized or unresolved (disorganized infants).

In longitudinal studies, children assessed in the strange situation as infants are administered the AAI as young adults to determine the continuity of attachment patterns over time (Waters, Hamilton, and Weinfield, 2000). According to these studies there is about an 80% continuity between infant attachment patterns and adult attachment state of mind (Fraley, 2002). In 20% of the cases the attachment status changes over time (usually from insecure to secure, but sometimes the other way). The term “earned security” is used for those individuals who were either assessed in the strange situation as insecure and later in life are assessed as secure, or whose experiences in childhood would ordinarily lead us to expect an insecure state of mind (strange situation data is not available) but are assessed as secure on the AAI (Roisman, Padron, Sroufe and Egeland, 2002). This category of “earned secure” is significant for clinicians, because it suggests that attachment status is changeable. In other words, how a child or adult regulates attachment distress can change over time. What factors contribute to earned security? Researchers (Roisman, Padron, Sroufe and Egeland, 2002) have found that when a child changes from insecure to secure, it is most likely to be affected by a relationship. This makes sense because insecurity grows out of relationships, so one would expect “earned security” to grow out of relationships.

Another important way the AAI data has been utilized is to examine the relationship between the parent's attachment status and the attachment relationship between that parent and her/his infant (Main and Goldwyn, 1998). These studies have indicated that the most robust predictor of the attachment pattern between the infant and her/his parent is the attachment status of the parent. In other words, if a parent has a secure state of mind of attachment, there is as high as an 80% chance their infant will have a secure attachment to that parent. This is true for insecure attachment as well. In other words, adults who are securely attached are sensitive and cooperative parents therefore they will engender these same qualities in their infants. Dismissive parents avoid acknowledging their own attachment needs as well as those of their infant and/or may be critical of their infants attachment needs therefore their infants respond by minimizing their attachment needs and becoming avoidant. Preoccupied parents respond to their children's attachment needs unpredictably because they are still entangled in their own attachment experiences that emotionally intrude in their present relationships. Their infants respond by chronic attempts to feel secure and therefore, are clingy and difficult to emotionally soothe. Disorganized parents are abusive or otherwise frightening so their infants respond by approach - avoidance oscillation. These infants, when they are needing protection from their caregiver, they simultaneously feel fear and therefore, are experiencing “fear without solution.”

During the 1980s, social psychologists also became interested in attachment in adult relationships and it's relationship to interpersonal and group processes. Out of this track came a large body of social-psychological research on attachment style (rather than attachment status, the term used by developmental psychologists) and interpersonal functioning. Social psychologists developed their own self-report measures of attachment that could be quickly administered to a larger group of subjects and can scored relatively easily. Attachment was deconstructed differently, depending on the research group. For example, Shaver and colleagues

view attachment patterns as existing on two continuums, anxiety and avoidance (Brennan, Clark and Shaver, 1998). Low anxiety and low avoidance characterizes secure attachment. Dismissing attachment is characterized by low anxiety and high avoidance. Preoccupied attachment is characterized by high anxiety and low avoidance. And disorganized attachment is characterized by high anxiety and high avoidance. Bartholomew and her colleagues have deconstructed attachment more in line with Bowlby's initial conceptualization – internal working models of self and others (Bartholomew and Horowitz, 1991). Like Shaver and his colleagues, Bartholomew places attachment on two continuums – negative and positive feelings about self, and negative and positive feelings about others. Secure individuals have positive feelings about self and others. Dismissing individuals have positive feelings about self, but negative feelings about others. Preoccupied individuals have positive feelings about others, but negative feelings about self. And disorganized individuals have negative feelings about self and others. Although there was some initial conflict between the self-report measures and interview methods, recent studies has suggested that these different assessment tools may have more consistency than originally thought (Shaver, Belsky and Brennan, 2000).

A number of important findings have emerged from the research on attachment. Attachment is a form of dyadic emotion regulation (Sroufe, 1995). Infants are not capable of regulating their own emotions and arousal and therefore require the assistance of their caregiver in this process. How the infant ultimately learns how to regulate his/her emotions will depend heavily on how the caregiver(s) regulates his/her own emotions. As children become better at expressing their needs and emotions, they learn self-regulation skills. However, this dyadic regulation never entirely disappears. There is a time for both types of regulation (self and dyadic) throughout a person's life. Another important finding is that attachment is not a one-way street. As the caregiver affects the infant, the infant also affects the caregiver. This process is referred to as "mutual regulation" (Tronick, 1989). The "attunement" of the caregiver is critical to secure attachment patterns (Stern, 1985). Parents who are sensitive to the verbal and non-verbal cues of the child, are more likely to have securely attached infants. This is referred to as mentalizing ability or reflective function – that ability to hold the infants mind in their mind (Fonagy, Target, Gergely and Jurist, 2002). For the majority of securely attached individuals, the positive and adaptive manner in which they have learned to modulate attachment distress, learned through their interactions with their caregivers early in life, will continue unless their circumstances change or other experiences intervene. Likewise, with insecure infants and children, their particular behavioral coping mechanisms (of avoidance, resistance or approach/avoidance) may become more behaviorally sophisticated, but the net result (over-activating or under-activating) will essentially continue as the individual ages. Research has documented that adults assessed as having an insecure state-of-mind or insecure attachment style with regard to attachment have greater difficulties in managing the vicissitudes of life generally, and interpersonal relationships specifically, than those assessed as securely attached (Shaver and Mikulincer, 2002).

The neurobiology of attachment

Bowlby believed that attachment was a biologically based behavioral system (Bowlby, 1989). However, it wasn't until the 1990's, the decade of the brain, with the development of sophisticated scanning techniques that we were able to literally look into the brain and better understand how this behavioral system actually functions. The psychologist, Alan Schore, has

brought together findings from diverse areas such as clinical psychology, psychiatry, neurology, developmental psychology and psychiatry to create a coherent understanding of how the developing brain is impacted by attachment relationships.

Schore demonstrates that a rapid and significant brain growth spurt occurs from the last trimester of pregnancy through the second year. Infant MRI studies show that the volume of the brain increases rapidly during the first 2 years. A normal adult appearance is seen by 2 years of age. All major fiber tracts are in place by age 3 (Schore, 1994). Certainly the first two or three years of an infant's life are a time of opportunity, but may also be a time of vulnerability (Siegel, 1999). According to Schore, the important personality-creating experiences of parent-infant attachment overlap with this period of brain growth spurt. Most importantly, imaging studies have indicated that the right hemisphere is dominant in this early phase of development. Schore links the right brain with self-regulation and the implicit self, which are shaped by these attachment experiences (1994). He describes the right-brain to right-brain communication that occurs between the caretaker and the infant as being critical to the development of self-regulatory capacities. Psychologist Peter Fonagy (2001), reiterates that attachment relationships are formative because they facilitate the development of the brain's self-regulatory mechanism, and that the enhancement of self/other emotion regulation is key to healthy development. Schore also goes on to discuss how the psychotherapy process has a similar right-brain to right-brain communication aspect, that is primarily non-verbal in nature (Schore, 2003a; 2003b)

What are the mental capacities that are developing in the infant's brain during this critical period? Siegel (1999) states early childhood experiences with caretakers allows the brain (pre-frontal cortex in particular) to organize in specific ways, which forms the basis for later interpersonal functioning. Body maps, reflective function, empathy, response flexibility, social cognition, autobiographical memory, emotion regulation are regulated in right hemisphere. Clearly, a well-developed prefrontal cortex is critical to experiencing healthy interpersonal relationships. Siegel states:

“In childhood, particularly the first two years of life, attachment relationships help the immature brain use the mature functions of the parent's brain to develop important capacities related to interpersonal functioning. The infant's relationship with his/her attachment figures facilitates experience-dependent neural pathways to develop, particularly in the frontal lobes where the aforementioned capacities are wired into the developing brain.”

This phenomenon, explains why there would be such a high correlation between a parent's attachment status, as measured by the Adult Attachment Interview, and the infant's attachment status, as measured by the Strange Situation. He goes on to say:

“When caretakers are psychologically-able to provide sensitive parenting (e.g. attunement to the infants signals and are able to soothe distress, as well as amplify positive experiences), the child feels a haven of safety when in the presence of their caretaker(s). Repeated positive experiences also become encoded in the brain (implicitly in the early years and explicitly as the child gets older) as mental models or schemata of attachment, which serve to help the child feel an internal sense of what John Bowlby called “a secure base” in the world. These positive mental models of self and others are carried into other relationships as the child matures.”

Clearly, the neurobiology literature has opened the door to our developing a deeper understanding of the attachment behavioral system and its correlates in the brain. Bowlby would have been amazed by these newer developments, and at the same time, felt validated that his innovative theory has been substantiated by so many researchers and embraced by clinicians. Many clinicians treating domestic violence clients wonder why these neurobiological findings are so significant. It is not enough to know that most perpetrators have insecure attachment in order to bring about a change in behavior. It is critical that clinicians understand that insecure attachment is not just an intellectual concept, but that it relates to specific patterns of brain function and that it can be deconstructed to specific capacities of the right prefrontal cortex that significantly impact a person's interpersonal functioning – affect regulation, empathy, response flexibility, knowing how your body is responding to an emotionally competent stimulus and the ability to identify feelings, to name a few. Most clinicians will agree that these are important capacities that one must possess to successfully avoid violent acting out. Therefore, we are not just involved in changing behavior, but helping our clients develop important neural capacities, that they may be deficient in because of early childhood experiences.

There is another important reason why the neurobiology findings are critical to therapists. The techniques we typically utilize to effect change in treatment such as interpretation, education, and skill building may not be sufficient to bring about lasting (one may even say – neurobiological) change in our clients. Schore suggests (2003a; 2003b) that the right-brain to right-brain attunement that occurs between a parent and infant is primarily a non-verbal, non-intellectual process. He suggests that psychotherapists must appreciate this fact if they want to make an impact on the neural-capacities of the right brain. This is similar to cross-cultural counseling, but the different culture we are trying to understand is in the right hemisphere of our client. The right hemisphere processes information quite differently from the left hemisphere (Trevarthen, 1996). The right hemisphere's specialization in affective awareness, expression and perception, which should be interesting to clinicians who are helping people learn to develop more healthy ways of functioning in these areas. However, the language of the right hemisphere is different from the left. As opposed to the left hemisphere, whose linguistic processing and use of syllogistic reasoning (looking for logical, linear cause-effect relationships) which we are so used to utilizing in our day to day living, the language of the right hemisphere is non-verbal and body-oriented (Siegel, 2001). It would make sense that changing these capacities of right-prefrontal functioning, will necessarily involve a non-verbal and body-awareness component. One of my recommendations of this paper will be to encourage therapists to utilize their non-verbal and bodily reactions in psychotherapy to better understand their clients and ultimately help them understand themselves and develop more adaptive affect regulatory capacities. I will explore the pragmatics of this process further when I discuss the therapeutic alliance.

Attachment theory and domestic violence

Don Dutton's groundbreaking studies on batterer typology (1988), along with other domestic violence researchers (Babcock, Jacobson, Gottman and Yerington, 2000; Hastings and Hamberger, 1988; Holtzworth-Munroe, Smart, and Hutchinson, 1997; Saunders, 1987), found that there is not one type of batterer. This finding alone should have eroded the idea that one form of treatment intervention would be enough to satisfy all batterers, however, single

intervention approaches have persisted over the years. Eventually, Dutton began to incorporate attachment measures into his interview protocol (1994). It became almost immediately clear that different patterns of attachment also began to emerge. As predictable, the vast majority of perpetrators were assessed as having insecure attachment. Approximately 40% had dismissing attachment (as compared with 25% in the non-clinical population), 30% preoccupied attachment (as compared with 10% in the non-clinical population), and 30% disorganized attachment (as compared with 5% in the non-clinical population). Dutton utilized a self-report measure developed by Kim Bartholomew, The Relationship Scales Questionnaire (RSQ) (Bartholomew and Shaver, 1998). These findings were corroborated by the research conducted by Amy Holtzworth-Monroe (1997). Holtzworth-Monroe utilized both the RSQ and AAI in her research with perpetrators and found similar results with both measures. What these data suggest, is that domestic violence perpetrators have higher rates of attachment insecurity than the general population and that incorporating attachment theory into understanding the psychology of perpetrators may ultimately help us devise interventions that will facilitate the process of “earned security.” This data also proves that batterers represent a heterogeneous population and that different interventions may be necessary for different clients depending on how they regulate attachment distress. For example, batterers with a dismissing attachment status down-regulate affect because their attachment figure was non-responsive to their emotional needs, so interventions need to focus on helping these individuals identify disavowed affect and learn constructive ways of expressing feelings and needs in a relationship context. Conversely, preoccupied clients have learned to up-regulate attachment distress in order to get their attachment figure to respond to their needs. These individuals need to learn how to self-soothe when activated and not depend solely on their attachment figures to soothe them via proximity maintenance. Disorganized batterers have learned that interpersonal relationships are dangerous. They have learned to regulate attachment distress through approach and avoidance. When these forces are strongest, it can result in a breakdown in cognition and affect resulting in uncontrollable rage and dissociation. These individuals need to address previous traumas and losses in order to break the disorganized processes that contribute to aggression and violence. This is in line with Dan Saunders’ (1996) outcome study that indicated that batterers who have experienced childhood abuse benefit more from psychodynamic treatment models that emphasize resolution of childhood abuse dynamics. Although the goal of domestic violence treatment for each of these attachment categories is similar - cessation of violence - how that goal is achieved will differ depending on how each client typically regulates attachment distress.

Traditional domestic violence intervention

For the past twenty-five years or more, batterer intervention programs have utilized some combination of cognitive behavioral techniques and education. The more feminist based programs tend to lean more toward education, particularly about sex role issues and power and control over women, whereas more therapeutic programs focus more on behavioral techniques such as time-outs and anger journals. Ironically, with all the debate that goes on within the field about which interventions are more appropriate, the psychotherapy research to date is fairly unequivocal in its finding that the most robust predictor of change in psychotherapy is not the techniques or even the brilliant interpretations that therapists devise, but the relationship between the client and the therapist (Horvath and Greenberg, 1989; Luborsky, 1994; Stern, 2004). With all the debate about technique in domestic violence circles, has left little focus on the therapeutic

alliance and how to best facilitate that relationship in the context of batterer intervention programs.

Using attachment theory to understand the therapeutic alliance

In a recent article (Sonkin, 2005), I discuss how attachment theory can help therapists develop the alliance when they view the therapeutic relationship as an attachment relationship. Bowlby (1969) believed that intimate attachment to other human beings are the hub around which a person's life revolves. From these intimate attachments, a person draws his strength and enjoyment of life. He also believed that one such attachment might be a person's therapist. Bowlby (1998) described the five tasks of attachment informed psychotherapy. One of those tasks is to explore the relationship with a psychotherapist as an attachment figure. Bowlby believed that the therapist would be viewed as an attachment figure regardless of whether or not the client is aware of this fact. According to the theory, parent-infant attachment relationships will manifest four characteristics (Hazan and Zeifman, 1999): proximity maintenance (the infant will balance the need for closeness with a need for exploration), separation distress (the infant will experience varying degrees of distress during periods of distress), safe haven (will seek the parent when under distress), and secure base (will use the parent as a secure base to explore the world). Bowlby believed that these same dynamics held for other close attachment relationships in life, such as the therapist-client relationship. In other words, clients will similarly use the therapist to explore different ways of balancing autonomy and closeness, will experience some distress upon separation, will seek the therapist during times of distress and use the therapist as a secure base to not only explore the physical world, but also the inner psychological world (Schore, 2003a; 2003b).

Ainsworth (1972) described four phases in the development of attachment in early childhood, based on observations of babies in Uganda and in her research laboratory in Baltimore: preattachment, attachment in the making, clear-cut attachment, and the goal corrected partnership (Bowlby, 1969, 1982). Although there has been debate about how and when they stages take place, the bottom line is that more psychologists agree that attachment is a process, and that it changes over time (Fraley and Shaver, 2000). Pre-attachment involves the nondiscriminative orientation and signaling to caregivers, without a preference for one caregiver over another. This may certainly be the case when the client is interviewing different therapists to assess a good match. In attachment-in-the-making the child is learning to reach out more selectively for caregivers than for strangers, and is more easily soothed by familiar caregivers than by others. At some point in the relationship, the client will prefer to speak with the therapist about their difficulties, than people who are less familiar. Clear-cut-attachment has occurred when child shows "goal-corrected" activity (locomotion and signaling) to get and keep a specific caregiver closer. The repertoire of attachment behaviors typically includes following, approaching, and clinging to the attachment figure, as well as protesting separation from her. There is a clear-cut attachment relationship between the therapist and the client, when the client seeks out the therapist for protection (in the emotional sense), soothing, and guidance. This clear-cut attachment may also manifest during times of separation or reunion (holidays, other absences, or even at the end/beginning of the session). Many therapists often state that they don't always know when it is not there, but it is usually very clear when the clear-cut attachment is present.

Bowlby (1969) first introduced the concept of the “goal-corrected partnership, the last stage of the attachment process, and Ainsworth (1972) expanded upon it, but to date it is still a somewhat elusive concept. In the clear-cut attachment relationship, the parent is the primary holder of the mind of the infant in their mind. In other words, the parent is not expecting the infant to balance their needs/feelings with the parents. However, over time, as the child develops emotionally, she/he will be able to see the parent as a separate being with their own needs and feelings, and subsequently is able to hold this in conjunction with their own. The goal corrected process involves the ability to mentalize or develop a theory of mind in both partners of the relationship, and now the child becomes a partner with their caregiver in planning how they will together handle attachment and separation (Fonagy, et. al., 2002). However, in spite of this developing capacity in the child, there will be times when the parent will need to be the primary holder of this capacity. This process will occur in the later stages of therapy as the client is better able to identify their attachment feelings and needs, express them, understand how insecure attachment patterns are triggered under certain conditions and is able to balance their needs for closeness with the needs of separateness of therapist.

Like the process of the developing attachment that occurs in the child-parent relationship, the developing of the therapeutic relationship will follow a similar process: an early stage that is more non-preferential, to flirting with attachment, to a clear cut attachment relationship and finally a goal corrected partnership. And like the patterns of attachment that emerged in the stressful Strange Situation Procedure, the natural ruptures and reunions that occur in the psychotherapy that are likely to activate the attachment behavioral system of the client, will become grist for the therapeutic mill. Because more perpetrators of domestic violence have had particularly negative experiences in their family of origin attachment relationships, simply walking into the therapist's office is likely to cause some degree of anxiety. In this unusual type of relationship, the client has the opportunity to have these reactions and patterns of attachment brought to their attention, reappraise their functionality and learn new methods of regulating attachment distress.

How does one facilitate the process of attachment in psychotherapy? As described earlier, Bowlby (1969, 1973, 1980) described the attachment relationship from an ethological perspective as being a biologically base system that is automatically set into action when the new born infant comes in contact with the mother. The quality of the attachment will depend on the interaction of the mother with the infant, and the attachment will occur because of its biological function handed down by evolution. Additionally, infant-parent attachment may be conceptualized as a form of dyadic regulation. The infant uses the mature functions of the parent’s mind (in the case of secure attachment) to learn how to regulate their own emotions. When the infant cries or shows distress through some other non-verbal means, it becomes up to the caregiver to respond in a way that helps to keep the distress and arousal within reasonable limits. Early in life, the caregiver is solely responsible for regulating the infant's emotions, which requires sensitivity to the infant's signals. For a caregiver to be sensitive requires that they are good at recognizing signals, interpreting them and responding in a quick and appropriate manner. For them to help the child regulate affect in an adaptive manner, it requires that they know how to adaptively regulate affect. Likewise in therapy, the quality of the attachment between the client and the therapist will, in part, depend on how the therapist interacts with the

client. The better the therapist is at adaptive affect regulation, the more sensitive and attuned they will be with their client. As infants come into the world with their own unique temperaments and personalities, most perpetrators of domestic violence due to insensitive parenting, are not good at regulating their own emotions, and therefore enter into therapy with conscious and not-conscious affect regulation patterns and working models of close relationships. Therefore, it is critical that therapists working with perpetrators are able to read those signals, interpret them correctly and respond quickly and appropriately and to help slowly and gently move them from insecure affect regulation patterns and negative internal working models to more secure patterns of regulating affect and positive working models of close relationships.

Siegel (1991) writes about the non-verbal communication of emotions and the importance of contingent communication between therapist and client. Contingent communication begins when Person A sends a signal to Person B: these signals are both verbal and non-verbal signals (facial expressions, body movements/gestures, tone of voice, timing and intensity of response, etc.). Person B needs to recognize the signal, interpret it correctly and send back a signal to Person A. Now this response is not just simply a mirror of what was received, but Person B sends a message that the original signal was received, interpreted and is being responded to by the receiver: in other words "I got it." When this occurs, the sender feels felt or understood and then the process continues. Trevarthen (1993) contends that contingent communication is the basis of healthy, collaborative communication and facilitates positive attachments.

In psychotherapy, most communication between the therapist and patient occurs on this non-verbal level. The role of the therapist is to watch for non-verbal signals (a right brain to right brain process) and work to interpret them and respond to them appropriately. This seems so elementary and each of us probably remembers a talk in graduate school about the value of non-verbal communication. Yet, what these writers suggest is that the ability to read and interpret these non-verbal signals is more than a therapeutic trick we occasionally pull out of our bag. It is the basis of developing the therapeutic alliance, which in turn is the key to positive therapy outcome. Many perpetrators of domestic violence enter into therapy under duress and emotionally difficult situations (such as a separation or divorce). It is critical that therapists listen and look for these nonverbal signals and respond upon the first contact and respond in a sensitive and caring fashion. So much of domestic violence literature emphasizes confrontation of minimization and denial, and though it is important to address these issues, it is probably more important to attend to the client's emotional state and respond in an empathic and helpful way. Just walking into the therapist's office is going to trigger attachment distress for most clients. Add to this, the fact that the client is being forced to attend therapy and that they may be anxious about losing their family. Attending to the therapeutic alliance is going to give the therapist more leverage later on down the road to deal with the other issues in therapy such as denial, minimization and inspiring commitment to behavior change.

When people who have completed successful therapies (in their own definition) are asked years later what was it about the therapy that brought about the most significant change, they will not talk about the skills or the brilliant interpretations of their therapists. Instead, they will recall a moment in the interaction, when there was a deep and meaningful connection they experienced and that it brought about a significant and lasting change. Daniel Stern (2004) refers to these

interactions as "now moments" in psychotherapy. These are flashes of interactions between the therapist and the client that are rich in potential for change and growth in the client, but also in the therapist and the relationship as well. Stern describes the process of therapy as moving along in a somewhat spontaneous and sometimes random manner until these moments occur. Occasionally there is a moment that will occur between therapist and client – one of great emotional potential. It can have a positive valence or negative one – but regardless, it carries with it a chance for emotional connection that transcends technique. In fact, resorting to technique or interpretation at those moments loses the potential for the connection. If the therapist responds in a genuine and spontaneous way, that moment can turn into what Stern refers to as a "moment of meeting." In that moment there is a deep sense of connection and intimacy. For individuals in psychotherapy who do not experience those moments are missing something important indeed. When "now moments" are recognized in the context of the psychotherapy, there is the potential for a deep connection between the participants, and as the studies have indicated (Luborsky, 1994), this is a necessary ingredient for positive therapeutic outcome.

In my work with perpetrators of domestic violence, I try to both keenly attune myself to their signals, both verbal and nonverbal. Observation of the client is key to noticing these changes in states of mind of the client. But because much of interpersonal communication goes on below the radar or outside of our consciousness, there will be many instances when recognition of signals is not sufficient. As mentioned earlier, Tronick (1989) states that affect in the attachment relationship is a two-way street: the infant is affected by the parent and the parent is affected by the infant. In other words, the parent feels what the infant is feelings. There is new research to suggest that a particular part of the brain, called the mirror neuron system (Iacoboni, Woods, Brass, Bekkering, Mazziotta, and Rizzolatti, 1999) is responsible for this phenomenon. The mirror neuron system is hypothesized to be the biological basis of our ability to experience empathy (Preston and de Waal, 2002). This system allows us the brain to simulate in ourselves, an emotional response observed in others, and this process does not have to be conscious. In other words, we can feel what others feel simply by observing their signals and this process occurs whether we are conscious of it or not. Therefore, another way we can learn to be sensitive to our client's emotional state is by being attuned to our own emotional state when in their presence. To complicate matters, changes in the therapist's state-of-mind will be picked up by the client's mirror neuron system and will either exacerbate or reduce their anxiety. This close attention to the process of contingency is not only critical to the development of the therapeutic relationship, but to help the client learn more adaptive affective regulation skills as well. When a patient feels felt by the other, they experience a deep sense of being understood, which contributes to positive feelings associated with close relationships. When the therapist is regulating their affect in a constructive manner, the client will learn how to do the same, whether it's made explicit or not.

The implicit message here is that the better the therapist is able to regulate attachment related emotions, the better they can assist their client develop more adaptive emotional regulation strategies. Therefore, the more secure the therapist vis-a-vis their attachment status, the more likely they will help their clients develop more secure strategies in regulating affect. Even though parents with insecure attachment can be taught how to be more sensitive to their infants, they are not going to perform as well in the long run as parents who have secure attachment from

the start. I believe this is true for therapists as well. We can teach therapists with insecure attachment how to be more sensitive to non-verbal cues, but they are not going to fare as well as therapists who have secure or earned-secure attachment. The reason for this is simple. Individuals cannot be conscious of all the micro-interactions that occur within therapy hour. Therefore, there are going to be many misattunements that the therapist with insecure attachment will miss. Not only will they miss these opportunities for contingency, they will also not attend to the rupture in the relationship and the necessary repair that would follow. Secure and earned secure therapists will not only be more contingent in their communication with the client, but when mis-attunements occur, they will notice them and attend to the necessary repair of the relationship.

What I am suggesting is that securely attached adults automatically "do" certain things with their infants that result in attachment security in their children. Likewise, securely attached therapists automatically "do" things with their clients that result in increased feelings of security in their clients. Although researchers have tried to demystify these patterns of interactions into observable behaviors, I don't believe you can break down everything to observable behavioral components. What does this mean to psychotherapy? Simply stated, the more integrated and aware the therapist is of her/his own patterns of regulating attachment emotions, the greater he/she will be able to help his/her patients achieve integration and awareness of his/her own. From an attachment status point of view, the more secure the therapists, the greater they can imbue security in their patients. This is why our own personal therapy and consultation is so important to our work as therapists.

The use of affect in the treatment of perpetrators

For the past twenty-five to thirty years, most domestic violence perpetrators intervention programs to one degree or another have focused on affect regulation as one of their most important treatment goals. Early writers in the field (Dutton, 1998; Ganley, 1981; Sonkin and Durphy, 1997) have discussed cognitive and behavioral techniques to improve affect regulation, such as Time-Outs (walking away as anger builds), journaling when experiencing anger, and cognitive-restructuring (using positive self-talk to reduce states of anger) in great detail. Although there has been tremendous controversy in the field as to the correct balance between emotion communication skills and attitude change, most programs focus their efforts in both of these areas.

Over the past twenty years, the affective neurosciences have evolved primarily because of improved imaging techniques that have allowed us to literally peek into the brain and observe its function when a person is experiencing emotion. Likewise, these techniques have allowed us to look into the minds of individuals in various disease states or who have suffered head trauma, and understand how different diseased or injured structures in the brain will cause changes in behavioral functioning. These techniques have also allowed us to better understand how emotion and cognition work together to create the experience of feeling (Damasio, 1999; Panksepp, 1998). Additionally, these imaging techniques have also elucidated how the two hemispheres of the brain may operate very differently in important domains of psychological functioning such as memory (Kandel, 1999; Tolving, 1993) and emotion (Davidson, 2003). Due to space

restrictions, I would like to discuss the findings of two researchers, Damasio and Davidson, that I believe are extremely relevant to the practice of domestic violence treatment.

As mentioned earlier, most intervention programs consider improved affect regulation abilities to be paramount in their treatment goals. Yet, from my experience providing consultation to clinicians, many of the interventions utilized by psychotherapists reflect obsolete notions of emotion and its regulation. For example, most therapists, when they think of emotions usually focus on those described by Darwin (1965): anger, sadness, happiness, surprise, disgust, fear. Additionally, many psychotherapists liken the relationship between different emotions to that of an onion, for example, that under anger is sadness or fear. Many therapists view emotion and cognition as separate processes. Another misconception is that emotion is something you experience in your mind as opposed to the body. Lastly, many therapists use the terms emotion and feeling synonymously. Let's look at each of these misconceptions and how clinicians treating batterers can utilize new findings in affective neurosciences into their treatment approach.

What are emotions? According to Damasio (1999), emotions are packages of solutions handed down by evolution to assist organisms to solve problems or endorse opportunities. The purpose of emotions is to promote survival with the net result being to achieve a state of wellbeing (Ryff, Singer and Love, 2004). According to Damasio's theory, there are different types of emotions. One type of emotion is called primary emotions. Those are the emotions originally described by Darwin (anger, sadness, happiness, surprise, disgust, fear). These emotions are also present and can be measured in other species as well. This type of emotion is characterized by a quick onset, burst and rapid decay. Not to say that these primary emotions can't last for a long period of time, for example they could constantly be stimulated by an ongoing emotionally competent stimulus (a term Damasio utilizes to refer to the external or internal stimulus that evokes the emotional response). But most importantly, these emotions are directly involved in the organism's management of life and may occur without the organism's awareness.

Another category of emotion are a less complex type from the primary ones. Damasio refers to these as background emotions. They are the type of emotion that one experiences when one awakes in the morning and feels a strong sense of possibility for the day (or the opposite), or when someone is asked how they are feeling and the response is simply good or bad. These emotions are present in the background and may exert their influence on us throughout the day but without necessarily our awareness. With these two types of emotions alone, one can see how background emotions may set a certain emotional temperature and that may affect how one experiences a primary emotion. For example, you wake up feeling excited and positive about the day (background emotion), but then your spouse says something critical. Because of the pre-existing positive state of mind it may trigger anger, but only to a low intensity. Imagine waking up in a very negative state of mind and experiencing the same critical statement from your spouse. The anger response may be quite different from the previous situation. Learning about these different types of emotions can help clients better understand their particular reactions to emotionally competent stimuli.

The third type of emotions is the social emotions. Compared to background emotions, these are extremely complex emotions that usually occur within the social context. Emotions such as shame, contempt, resentment, awe, jealousy may be thought of as combinations of primary

emotions or ones that have their own unique configuration and purpose. Like the primary and background emotions, these emotions may also get activated without conscious awareness, and will exert their influence on the person's behaviors and cognitions. For example, guilt may become activated and inhibit certain behaviors or choices. Likewise, altruism may cause a person to simply hand back money to a cashier at the supermarket who had given her or him too much change, without giving it a second thought. Like the other types of emotions, social emotions can become activated and manage the organism without a simultaneous process of reflection (or what Damasio calls, feeling). With this third type of emotion, the above example can become even more complex. Imagine that our imaginary person who is about to get criticized by his spouse, grew up in a home where he was made to feel shame and guilt for the slightest infraction. This is likely to be significant contributing factor to how he experiences and responds to his spouse's criticism.

Another important characteristic of emotions is that they generally occur in the body first, not just the muscles or specific organs, but the visera and chemistry. Damasio (1999) has demonstrated that there is a dedicated system within the spinal cord for transmitting information about emotion from the body to the brain. There are particular trigger points in the brain for specific types of emotions (such as the amygdala for fear or certain social emotions in the ventral medial prefrontal cortex) and that these structures can activate behavioral solutions without the brain knowing it's experiencing an emotion at all. Therefore, we are capable of experiencing emotion without conscious awareness. This process of course makes evolutionary sense. If you are out on the savannah and a t-rex start running toward you, you really don't want to think about it. This means that there are times when we are in the process of emoting in a rather "thoughtless" manner. This fact helps us to understand how emotions get communicated non-verbally without our awareness.

Feeling occurs when a person becomes consciously aware of the fact that they are in the process of experiencing emotion. Feeling occurs in the part of the brain called the prefrontal cortex, which has a region that is specifically dedicated to recognizing changes in the body. The orbital prefrontal cortex is thought to be involved in this body mapping process, which would then lead a person to be able to register changes in the state of the body, which in turn would allow for the sensing of emotion. Damasio considers the feeling of emotion similar to a sense – not unlike smell, hearing, sight, touch and taste. Feelings reveal to us the state of the organism at any particular point in time. Feelings allow us to make decisions about how to respond to emotions; they allow us the opportunity to make a choice. Damasio (2003) makes the point that the process of emoting does not end in a neutral state, but the goal of the process of emoting is to end in a state of wellbeing, which is the reward for emoting. Other researchers have promoted a similar hypothesis (Urry, Nitschke, Dolski, Jackson, Dalton, Mueller, Rosenkranz, Ryff, Singer and Davidson, 2004). The affect regulation strategies that batterers learned in childhood don't ultimately result in feelings of well-being, but more frustration and distress, particularly when those strategies are placed in the relationship context. For example, a preoccupied client's dependency on their partner to soothe their fears of loss and neediness through clinging or preoccupied anger ultimately drives their partners away, producing even greater feelings of loss and anxiety. Likewise, a dismissing client's over-reliance on independence and apparent devaluing of attachment to deal with their fears of closeness, only leads to greater feelings of loneliness when others perceive them as not needing intimacy.

In treating perpetrators of violence, we need to help them become more aware of their different types of emotions (the process of feeling) and how they interact with each other, by strengthening that part of their brain that reads changes in their physical state. We also need to help them better identify the competent stimuli that trigger the different emotions in the first place. These stimuli can be external to the person (such as criticism from a spouse or defiance by a child) but it can also be internal (such as a memory from childhood that is triggered by an approximate present situation – such as the critical spouse example from above). We also need to help them appreciate the range of their emotions going beyond the primary ones (such as anger and fear) and appreciate both the more simple background and more complex social emotions and how they interact both negatively and positively. We need to help them see that the strategies they learned in childhood do not lead to feelings of well-being, but just the opposite. Lastly, by making one more aware of the emotional process, we give our clients the opportunity to make better decisions about how to cope with their emotional responses.

Because emotions are often occurring without the person knowing (having a feeling), then the therapist is at a disadvantage without the assistance of a brain scanner that would tell us that our client is in the process of emoting. However, there is hope. Because the body is so directly involved with the emotion process, and that the body usually responds before the emotion's felt, then the bodily changes that occur could be recognized by the therapist, who can turn bring this awareness to the client. The typical signs that an emotion is occurring include changes in facial expression (Ekman and Friesen 1978), eye gaze, tone of voice, bodily motion, and timing of response (Siegel, 1999). Therefore, therapists would need to pay careful attention these nonverbal cues in their clients, and carefully bring this to their client's attention. Likewise, as described earlier, therapist can make use of their own emotional reactions (those activated by the mirror neuron system) to better understand their client's state of mind. Confrontation, though at times can be useful, is generally not helpful when a person is unaware of their emotional state. A gentle and supportive approach can help to raise the client's awareness of their emotional state whether in the context of group, individual or couples psychotherapy. Because of their history of deactivating or hyper-activating attachment emotions and needs (or a combination of the both in the case of disorganized attachment), these clients will need consistent and sensitive attunement by the therapist to learn to recognize and tolerate (feelings) all of their emotional states and develop new strategies for regulating them.

Left Brain – Right Brain

Another exciting concept in the affective neurosciences is the notion that different parts of the brain specialize in different capacities. Daniel Siegel (1999) writes extensively about the notion of neural integration and how integrated systems respond more flexibly and adaptively to problem situations. Neuro-imaging technology has made it become increasingly clear that the different hemispheres of the brain (right and left), even of the same neuro-structures may have different functions. Richard Davidson (2004) has found differences in the patterns of activation of the prefrontal cortex with regard to approach and avoidance emotions. His studies have included brain scans of monks who have studied with the Dali Lama (Davidson, 2000). He found that these individuals had particularly positive outlooks on life and this was reflected by difference in the activation of their right and left prefrontal cortex. Individuals who have an

overall positive outlook on life, are more likely to have higher left to right prefrontal activation in response to problem solving, as compared to individuals who have a more negativistic outlook on life (who have a lower left to right ratio of activation). In other words, some people do really see the glass as half full and others really see it as half empty. What is most interesting about his work is that the pattern of activation can be changed through mindfulness techniques. Individuals with secure attachment are likely to have this more positive outlook, whereas individuals with insecure attachment are more likely to possess a negative outlook. This data suggests that perhaps an important part of psychotherapy with perpetrators may include teaching certain clients mindfulness techniques in the service of developing more effective affect regulation strategies. If emotion begins in the body, then training the mind (the prefrontal cortex in particular) to be more mindful of the body and its changes will help a person be more aware of their emotions. My clinical experience has indicated that perpetrators with moderate to severe affective disorders who participate in meditation and other similar practices report that these activities dramatically increase feelings of wellbeing, and when practiced consistently, and can have a long-lasting effect.

What these findings suggest, is that the regulation of affect, particularly with individuals with insecure attachment, is much more complex than early theories of intervention with batterers have suggested. That learning to identify and tolerate both negative and positive emotional states involves understanding what an emotionally competent stimulus is, how the wide range of types of emotions are activated in the body, and how consciousness is necessary to allow the individual to feel the emotion and make adaptive choices with regard to responding to the stimulus. Most importantly, the notion that the final goal of this complex process is to achieve a state of well-being, rather than simply neutrality or some resting state of quiescence, is one reward for the change in the strategies in the first place. The other reward is to have a more positive and mutually gratifying interpersonal relationship.

In Closing

Expanding our paradigms for treating domestic violence can only be a win/win situation. It may not only improve the outcome of treatment for our clients but it will keep therapists current in our ever-growing profession. Another benefit to making a change is that it will keep therapists from getting stuck in a particular orientation, which can lead to a clinical nearsightedness. After practicing for 25 years, I was beginning to wonder what would generate the kind of excitement I experience at the beginning of my profession. I have discovered that attachment theory and neurobiology have met that need. Hopefully it will do the same for you. I realize that this chapter is only a taste of the huge body of literature that is evolving in these two areas. I encourage you to read and attend workshops that will expand upon this brief overview. It didn't take a major leap for me to see the connection between domestic violence and attachment theory and the affective neurosciences, and I hope this chapter has made those connections for you. It is critical that the domestic violence field incorporate these exciting areas of study to enhance our understanding of both victims and perpetrators, and most importantly how to effectively intervene in the clinical settings.

If you practice in a state that gives the clinician little leeway for incorporating innovative techniques into their treatment with court-mandated batterers you might find the aforementioned

discussion extremely frustrating. However, there are ways you can utilize this material without losing favor with your local criminal justice agency that refers your clients.

1. Don't overhaul your model, just fine-tune it. I believe that one can incorporate any of these ideas into any clinical model, whether it's the Duluth re-education approach, a cognitive-behavioral model or a family systems approach. Attachment theory and the neuro-science findings are not based on any particular clinical theory and therefore can be applied in many different ways depending on the clinical orientation of the therapist. Take just one area and begin to explore ways to develop your approach to treating clients. For example, focus on non-verbal cues, or using your own emotional reaction to clients to understand their emotions, or begin to hypothesize as to attachment style of your clients. Consider using one of the attachment questionnaires describe earlier in your assessment protocol. Begin to use mindfulness techniques with clients who exhibit a particularly negativistic outlook on life. Revamp your spiel on emotions to include primary, background and social emotions. Teach clients the difference between emotion and feeling.
2. Spread the gospel. Talk with other clinicians in your community who are treating court-mandated perpetrators of domestic violence about these and other findings in the attachment and neuroscience literature. In many communities, batterer intervention program facilitators meet on a monthly or quarterly basis to discuss their work with clients. Consider handing out an article on attachment theory and domestic violence that can be discussed at a future meeting. Invite professionals from other disciplines (such as attachment or neurosciences) to discuss their work at your meetings. We become too myopic when all we read is domestic violence. There is actually a lot more going on outside of our field than within it.
3. Receive consultation and training in attachment and neurobiology. The best way to stay current in the field is through education, whether it's workshops, books, tapes, consultation or other forms of learning. Many states require domestic violence providers to receive continuing education in order to keep their provider status. This is problematic, when the clinician is required to only get continuing education units in domestic violence workshops. Unfortunately, there are limited opportunities for clinicians to get innovative material in this field, because so many of the domestic violence workshops that are advertised are rehashing the same material they have for the past twenty years.
4. Break free of the court mandated system. There are more and more clients who are seeking treatment for domestic violence on their own. Granted, most of them are doing so upon duress of their partner. However, most court-mandated perpetrators are in treatment upon duress as well. It is up to the clinician to help either type of client want to be in treatment for him or herself. Perhaps using attachment theory may help to frame the therapy in such a way that more clients will want to return upon their own volition. Independent of the court-mandated system, clinicians can develop their own treatment approach as long as it is consistent with the mental health treatment standards within their community. There is nothing described in this chapter that is outside those standards.

5. Evaluation of outcome. Of course, much of the ideas discussed in this chapter are based on theories that have not been investigated within the domestic violence context. Therefore, before running to the bank we must continue to develop outcome studies that take into account specific types of intervention such as correlating attachment status and specific types of interventions based on attachment categories and treatment outcome. Because we have yet to have the data to suggest that incorporating this material will improve outcome, it doesn't mean that we should be hesitant to change the current models. The current models have a moderate effect (Babcock, 200x), so hopefully we can build upon our current treatment models to make them even more effective. Evaluating treatment outcome can be a complicated process, but it begins with keeping good records, conducting follow-up while the client is in treatment (Sonkin, 2003) and working with criminal justice agencies to develop systems for not only evaluating overall outcome of intervention, but also looking at matching specific types of clients with specific types of interventions.

6. Advocate change in state laws. As mentioned in the beginning of this chapter, it would be extremely frustrating living in a society that legislates the specifics of medical treatment. If you live in a state that does that with domestic violence, then it is important to speak with others about changing the law. These laws were written as a result of a grass-roots movement. Domestic violence laws may need to be changed by the same process, but within the field. It just takes a willingness to be unpopular with some groups. The challenge is in how to keep the spirit of the law while changing those aspects that prevent innovation and growth.

American Psychological Association Presidential Task Force on Violence and the Family. (1996). *Violence and the family: Report of the American Psychological Association Presidential Task Force on Violence and the Family*. Washington, DC: American Psychological Association.

Ainsworth, M. D. S., Blehar, M. C., Waters, E., and Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, N.J.: Erlbaum.

Babcock, Julia C., Jacobson, Neil S., Gottman, John M. and Yerington, Timothy P. (2000). Attachment, Emotional Regulation, and the Function of Marital Violence: Differences Between Secure, Preoccupied, and Dismissing Violent and Nonviolent Husbands. *Journal of Family Violence*, Vol.15, No.4, 2000.

Babcock, J. C., Green, C. E., and Robie, C. (2004). Does batterers' treatment work?: A meta-analytic review of domestic violence treatment outcome research. *Clinical Psychology Review*, 23, 1023-1053.

Babcock, J. C., Miller, S. A., and Siard, C. (2003). Towards a typology of abusive women: Differences between partner-only and generally violent women in the use of violence. *Psychology of Women Quarterly*, 27, 153-161.

Bartholomew, K., and Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 6, 226-244.

- Bartholomew, K., and Shaver, P.R. (1998). Methods of assessing adult attachment: Do they converge? In J. A. Simpson and W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 25-45). New York: Guilford Press.
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment* (2nd Ed). London: Hogarth Press.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation*. New York: Basic.
- Bowlby, J. (1980). *Attachment and loss: Vol. 3. Loss, sadness, and depression*. New York: Basic Books.
- Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. London: Routledge.
- Brennan, K. A., Clark, C. L., and Shaver, P. R. (1998). Self-report measures of adult romantic attachment. An integrative overview. In J. A. Simpson and W. S. Rholes (Eds.), *Attachment Theory and Close Relationships*. New York: Guilford.
- Bretherton, Inge (1992). The Origins of Attachment Theory: John Bowlby and Mary Ainsworth. *Developmental Psychology*. Vol. 28 (5) September, pp. 759-775.
- Cassidy, J. (1999). The nature of the child's ties. In J. Cassidy and P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 355-377). New York: Guilford Press.
- Damasio, A. (1999). *The Feeling of What Happens: Body and Emotion in the Making of Consciousness*. New York: Harcourt Brace.
- Damasio, A. (2003). *Looking for Spinoza: Joy, sorrow and the feeling brain*.
- Darwin, C. (1872, 1965). *The Expression of Emotion in Man and Animals*. University of Chicago Press: Chicago.
- Davidson, Richard (2000). Affect style, psychopathology and resilience: Brain mechanisms and plasticity. *American Psychologist*, 55 (11), 1196-1214.
- Davidson, Richard (2003). Darwin and the Neural Bases of Emotion and Affective Style. *Annals N.Y. Acad. Sciences*. 1000: 316–336 (2003).
- Davidson, Richard (2004). What does the prefrontal cortex “do” in affect: Perspectives on frontal EEG asymmetry research. *Biological Psychology*, 67, 219-233.
- Davis RC, Taylor BG, Maxwell CD (1998). Does batterer treatment reduce violence? A randomized experiment in Brooklyn. *Justice Quarterly*; 18: 171-201.

Dutton, D.G. (1988). Profiling wife assaulters: Some evidence for a trimodal analysis. *Violence and Victims*, 3(1), 5-30

Dutton, Don (1994). Patriarchy and Wife Assault: The Ecological Fallacy. *Violence and Victims*, 9, (2), 125 - 140.

Dutton, D. (1995a). *The batterer*. New York: Harper Collins.

Dutton, D. G. (1998). *The abusive personality: Violence and control in intimate relationships*. New York: Guilford Press.

Ekman, P., and Friesen, W. V. (1978). *The facial action coding system*. Palo Alto, CA: Consulting Psychologists Press.

Feder L, Forde DR. (1991). A test of efficacy of court mandated counseling for convicted misdemeanor domestic violence offenders: Results from the Brouward experiment. International Family Violence Conference. Durham, NH.

Fonagy, P. (2001) *Attachment Theory and Psychoanalysis*. New York: Other Press

Fonagy, P.; Target, M.; Gergely, G. and Jurist, E.J. (2002) *Affect Regulation, Mentalization and the Development of the Self*. New York: Other Press.

Fraley, R. Chris (2002). Attachment Stability From Infancy to Adulthood: Meta-Analysis and Dynamic Modeling of Developmental Mechanisms. *Personality and Social Psychology Review*. Vol. 6, No. 2, 123–151.

Fraley R. Chris and Shaver, Phillip R. (2000). Adult Romantic Attachment: Theoretical Developments, Emerging Controversies, and Unanswered Questions. *Review of General Psychology*, Vol. 4, No. 2, 132-154.

Ganley, A. (1981). *Participant's manual: Court-mandated therapy for men who batter - A three day workshop for professionals*. Washington, DC: Center for Women Policy Studies.

Hastings, J. and Hamberger, K. (1988). Personality characteristics of spouse abusers: A controlled comparison. *Violence and Victims*, 3, 31-48.

Hazan, C., and Zeifman, D. (1999). Pair bonds as attachments: Evaluating the evidence. In J. Cassidy and P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 336-354). New York: Guilford Press.

Henderson, A.J.Z., Bartholomew, K, and Dutton, D.G. (1997) He loves me, He loves me not: Attachment and separation resolution of abused women. *Journal of Family Violence* 12 (2), 169 - 192.

Hesse, Erik; Main, Mary (2000). Disorganized infant, child, and adult attachment: Collapse in behavioral and attentional strategies. ; *Journal of the American Psychoanalytic Association*, Vol 48(4). pp. 1097-1127.

Holtzworth-Munroe, Amy, Smart, Gregory L. and Hutchinson, Glenn (1997). Violent Versus Nonviolent Husbands: Differences in Attachment Patterns, Dependency, and Jealousy. *Journal of Family Psychology*, Vol. 11, No. 3, 314-331.

Horvath, A. O., and Greenberg, L. S. (1989). Development and validation of the working alliance inventory. *Journal of Counseling Psychology*, 36, 223-233.

Iacoboni, M., Woods, R.P., Brass, M., Bekkering, H., Mazziotta, J.C. and Rizzolatti, G. (1999). Cortical mechanisms of human imitation. *Science*, 286, 2526–2528.

Jones, Alison Snow; D'Agostino, Ralph B. Jr.; Gondolf, Edward W. Assessing the Effect of Batterer Program Completion on Reassault Using Propensity Scores. *Journal of Interpersonal Violence*, Vol 19(9), Sep 2004. pp. 1002-1020.

Kandel, Eric R. (1999). Biology and the Future of Psychoanalysis: A New Intellectual Framework for Psychiatry Revisited. *American Journal of Psychiatry* 1999; 156:505–524.

Levesque D. (1998). Violence desistance among battering men: Existing intervention and the application of the Transtheoretical model for change. Kingston, Rhode Island.

Luborsky, L. (1994). Therapeutic alliances as predictors of psychotherapy outcomes: Factors explaining the predictive success. In A. O. Horvath and L. S. Greenberg (Eds.), *The working alliance: Theory, research, and practice* (pp. 38-50). New York: John Wiley and Sons.

Leisring, Penny A., Dowd, Lynn and Rosenbaum, Alan (2003). Treatment of Partner Aggressive Women. In Dutton, Don and Sonkin, Daniel (eds). *Intimate Violence: Contemporary Treatment Innovations*. New York: Haworth Publishing.

Main, M. (1990). Cross-cultural strategies of attachment and attachment organization: Recent studies, changing methodologies, and the concept of conditional strategies. *Human Development*, 33, 48-61.

Main, Mary; Solomon, Judith (1986). Discovery of an insecure-disorganized/disoriented attachment pattern. In: *Affective development in infancy*. Brazelton, T. Berry; Yogman, Michael W.; Westport, CT, US: Ablex Publishing. pp. 95-124.

Main, Mary; Hesse, Erik (1990). Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In: *Attachment in the preschool years: Theory, research, and intervention*. Greenberg, Mark T.; Cicchetti, Dante; Chicago, IL, US: University of Chicago Press. pp. 161-182.

- Main M., Goldwyn R. (1993). Adult Attachment Classification System. Unpublished manuscript, University of California, Berkeley.
- Morgan, Hillary and Shaver, Phillip R. (1999). Attachment Processes and Commitment to Romantic Relationships. In Adams, J. and Jones, W. (eds), *Handbook of Interpersonal Commitment and Relationship Stability*, New York: Kluwer Academic/Plenum Publishers.
- Panksepp, J (1998). *Affective neuroscience: The foundations of human and animal emotions*, New York: Oxford Univ. Press.
- Pense, Ellen and Paymar, Michael (1993). *Education groups for men who batter: The Duluth Model*. New York: Springer Publications.
- Roisman, Glen, Padron, Elena, Sroufe, L. Alan and Egeland, Byron (2002). Earned-Secure Attachment Status in Retrospect and Prospect. *Child Development*. July/August.
- Rosenbaum, A. and Leisring, P.A. (2003). Beyond Power and Control: Towards an understanding of partner abusive men. *Journal of Comparative Family Studies*, 34,1, 7-22.
- Rothbaum, F., Weisz, J., Pott, M., Miyake, K., and Morelli, G. (2000). Attachment and culture: Security in the United States and Japan. *American Psychologist*, 55, 1093-1104.
- Ryff, Carol D., Singer, Burton H and Love, Gayle Dienberg (2004). Positive health: Connecting well-being with biology. *Phil. Trans. R. Soc. London Bulletin*, 359,1383–1394.
- Saunders, D. (1987). Are there three different types of men who batter? An empirical study with possible implications for treatment. Paper presented at the Third National Family Violence Research Conference. July 6-9, Durham, New Hampshire.
- Saunders, D. (1996). Feminist-cognitive-behavioral and process-psychodynamic treatments for men who batter: Interaction of abuser traits and treatment models. *Violence and Victims*, 11(4), 393-414.
- Schore, A.N. (1994). *Affect Regulation and the Origin of the Self: The Neurobiology of Emotional Development*. Mahwah, NJ: Erlbaum.
- Schore, A. N. (2003a). *Affect dysregulation and disorders of the self*. New York: Norton.
- Schore, A. N. (2003b). *Affect regulation and the repair of the self*. New York: Norton.
- Shaver, Phillip and Mikulincer, Mario (2002). Attachment-Related Psychodynamics. *Attachment and Human Development*, 2002, 4: 133-161.
- Shaver, Phillip R., Belsky, Jay, and Brennan, Kelly (2000). The adult attachment interview and self-reports of romantic attachment: Associations across domains and methods. *Personal Relationships*, 7, 25-43.

Shepard M. (1987). Interventions with men who batter: An evaluation of a domestic abuse program. Third National Conference on Domestic Violence. University of New Hampshire, University of New Hampshire.

Sonkin, D. J. (2000). Domestic violence: The court-mandated perpetrator assessment and treatment handbook. Sausalito, CA: Author.

She, M., "Predicting Batterer Recidivism Five Years After Community Intervention," Report, Duluth, Minnesota, 1990.

Siegel, DJ (1999). The developing mind: How relationships and the brain interact to shape who we are. New York: Guilford Press.

Siegel DJ (2001). Toward an Interpersonal Neurobiology of the Developing Mind: Attachment relationships, "mindsight," and neural integration. *Infant Mental Health Journal, Special Edition on Contributions of the Decade of the Brain to Infant Psychiatry*, 22:67-94.

Sonkin, D. J., and Durphy, M. (1997). Learning to live without violence: A handbook for men (Rev. ed.). Volcano, CA: Volcano Press.

Sroufe L.A. (1995). Emotional Development: The Organization of Emotional Life in the Early Years. New York, NY: Cambridge University Press.

Stern, Daniel (2004). The Present Moment in Psychotherapy and Everyday Life. New York: W. W. Norton and Company.

Trevarthen, C. (1993). The function of emotions in early infant communication and development. In J. Nadel and L. Camaioni (Eds.) *New perspectives in early communicative development*. (pp. 48-81) London: Routledge.

Trevarthen, C. (1996). Lateral asymmetries in infancy: Implications for the development of the hemispheres. *Neuroscience and Biobehavioral Reviews*, 20:571-586.

Tronick, E. (1989). Emotions and emotional communication in infants. *American Psychologist*, 44, 112-119.

Tulving E (1993). Varieties of consciousness and levels of awareness in memory. In: *Attention, Selection, Awareness, and Control: A Tribute to Donald Broadbent*, Baddeley A, Weiskrantz L, eds. London: Oxford University Press, pp 283-299.

Urry, H.L., Nitschke, J.B., Dolski, I., Jackson, D.C., Dalton, K.M., Mueller, C.J., Rosenkranz, M.A., Ryff, C.D., Singer, B.H. and Davidson, R.J. (2004). Making a life worth living: Neural correlates of well-being. *Psychological Science*, 15, 367-372.

van IJzendoorn, M. H., and Sagi, A. (1999). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy and P. R. Shaver (Eds.), *Handbook of attachment* (pp. 713-734). New York: Guilford.

Waters, Everett and Cummings, E. Mark (2000). A secure base from which to explore close relationships, *Child Development*, Vol 71(1), Jan-Feb. pp. 164-172.

Waters, Everett, Hamilton, Claire and Weinfield, Nancy (2000). The Stability of Attachment Security from Infancy to Adolescence and Early Adulthood: General Introduction. *Child Development*, May /June, Volume 71, Number 3, Pages 678-683.